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AMERITECH ILLINOIS' BRIEF ON EXCEPTIONS

INTRODUCTION

Illinois Bell Telephone Company ("Ameritech Illinois") respectfully submits this Brief on Exceptions related to the Hearing Examiner's Proposed Arbitration Decision on Rehearing ("HEPAD") issued on January 22, 2001. In particular, Ameritech Illinois takes exception to the HEPAD's recommendation to create several "Project Pronto UNEs" and allow CLECs to virtually collocate line cards in Ameritech Illinois' NGDLC RTs ("Project Pronto recommendation"). The Project Pronto recommendation ignores and violates applicable law and is not supported by the record evidence. In addition to the recommendation's legal infirmities, the recommendation is unsound as a matter of policy, because, if adopted, it will seriously disincent and potentially stifle innovation in a new market, the market for advanced services. The HEPAD's Project Pronto recommendation exhibits an unfortunate—and unwise—disregard for the serious and socially undesirable distortion of market outcomes that may result from regulators compelling excessive technological inefficient use of one firm's innovations and assets by other market participants.

From a public interest perspective, the Commission should be extremely cautious about imposing new and unnecessary obligations on a single participant, such as Ameritech Illinois (who participates only at the wholesale level), in an otherwise new, competitive market—which the advanced services market clearly is. It is undisputed that the advanced services market is dynamic and already an arena marked by robust competition between and among alternative emerging technologies, such as wireless broadband services and cable modem services (the latter of which currently dominate the market and are provided, for example, by AT&T and Time Warner over their extensive cable systems). And it is undisputed that, with the exception of Ameritech Illinois (which has never provided retail DSL services and is currently prohibited by law from doing so), all of the other market participants are essentially unregulated.

In these circumstances, to impose unnecessary obligations on Ameritech Illinois—a potential major market participant and major source of innovation—makes no sense from a policy perspective and flies in the face of the procompetitive goals of the 1996 Act and this Commission. It would be bad public policy, if not economically unprecedented, to impose burdensome, costly and unworkable regulatory requirements on but one potential, non-dominant supplier of advanced services when the dominant providers of such services—cable companies providing cable modem services—are not so regulated. Imposing such requirements would only lead to artificial market distortions, reduced or skewed investment incentives, fewer competitive advanced services offerings, and inefficient market outcomes, all of which ultimately will harm, not benefit, consumers.

As a policy matter, the Commission's objective should be to *eliminate* any regulatory imbalances that already exist in this market, not to exacerbate those imbalances. Nor should the Commission favor or provide artificial competitive advantages to one subset of advanced service providers, such as data CLECs, thereby reducing those CLECs' incentives to invest in their own networks and become true facilities-based providers.

The FCC, for one, has repeatedly recognized the danger of "overregulating" in an emerging, competitive market such as the advanced services market, declining, for example, to generally require cable services providers to provide competitors with "open access" to their cable systems and rejecting attempts by Rhythms, Covad and other CLECs to impose the exact same Project Pronto unbundling and collocation requirements that the HEPAD recommends here. This Commission should be similarly reluctant to tamper with market forces.

In short, the HEPAD's Project Pronto recommendation—which relates to the provision of advanced services, *not* traditional local exchange telephone service—neither complies with the

applicable law nor serves the Congressional objectives of encouraging innovation in and deployment of advanced services. Rather, by forcing Ameritech Illinois to provide CLECs with access to its innovations in a manner that is inefficient, costly, and plainly unnecessary to promote competition in the relevant market (the advanced services market), the HEPAD's recommendation would decrease, if not eliminate, any reasonable business incentive for Ameritech Illinois (or for any other incumbent LEC) to invest in, deploy and enhance its innovations in that market. As a result, the HEPAD's Project Pronto recommendation, if adopted, would only *reduce* competition in the relevant market, to the detriment of Illinois consumers.

As a threshold matter, the HEPAD's Project Pronto recommendation ignores—and hence, far exceeds—the scope of the Commission's authority in this Rehearing. As the HEPAD acknowledges, the first issue on rehearing involves only the question of whether the Commission's original Arbitration Decision erred in ordering Ameritech Illinois to include in its interconnection agreements with Rhythms and Covad language that would allow those CLECs to virtually collocate line cards in Ameritech Illinois' Project Pronto NGDLCs—not whether the Commission's original finding should be expanded or changed in any other way. Indeed, neither Rhythms nor Covad sought rehearing of the Arbitration Decision's conclusion on this issue and, therefore, cannot request that the decision be expanded in this Rehearing. Nevertheless, the HEPAD goes far beyond the NGDLC line card virtual collocation requirement imposed in the Arbitration Decision, and recommends that the Commission order Ameritech Illinois to incorporate into its interconnection agreements a requirement that it unbundle a multitude of specific network elements (in fact, it recommends creating almost as many new UNEs as currently exist in the FCC's entire national list), even though these new UNEs were not

identified in the Commission's original Arbitration Decision, and even though these new UNEs were not discussed in any witness' testimony submitted into the evidentiary record.

Perhaps more importantly, besides exceeding the scope of the Commission's authority, the HEPAD's Project Pronto recommendation runs directly counter to controlling FCC decisions and misapplies state law, to the extent that state law plays any role at all in this arbitration proceeding (which, of course, is supposed to implement *federal* law requirements). *First*, the HEPAD's Project Pronto recommendation would require Ameritech Illinois to unbundle packet switching functionality, in direct conflict with the *UNE Remand Order*, and therefore is preempted. *Second*, the HEPAD's Project Pronto recommendation unlawfully would require Ameritech Illinois to affirmatively create new combinations of UNEs on behalf of CLECS, in violation of the Eighth Circuit's holding in *IUB I* and *IUB III*. *Third*, the HEPAD's recommendation does not satisfy the necessary and impair standards established by Section 251(d)(2) of the Act. *Fourth*, the HEPAD's Project Pronto recommendation conflicts with the FCC's national policy framework established in the *Project Pronto Order*, and therefore is preempted by federal law. *Fifth*, the HEPAD's Project Pronto recommendation does not satisfy the requirements of Section 261(c) of the Act. *Sixth*, the HEPAD's recommendation does not meet the collocation standards set forth in Section 251(c)(6) of the Act. *Seventh*, the HEPAD's Project Pronto recommendation threatens to unlawfully require Ameritech Illinois to build new facilities or provide superior quality service to CLECs, in violation of *IUB I* and *IUB III*.

The HEPAD's Project Pronto recommendation also is unsound from a technical and policy perspective, as it would reduce, rather than enhance, investment, innovation, and ultimately competition in the advanced services market. Specifically, if the Commission were to adopt the HEPAD's Project Pronto recommendation, it would create serious and potentially

insurmountable technical and operational problems, as the record on rehearing establishes. Moreover, even if it were possible to overcome these problems, they likely would eliminate any reasonable business justification for Ameritech Illinois or SBC to proceed with the deployment of DSL-related Project Pronto facilities in Illinois. Ameritech Illinois just recently initiated its deployment of Project Pronto DSL-related facilities in Illinois, and it has not yet deployed those facilities on a widespread or significant basis. Accordingly, adoption of the HEPAD's Project Pronto recommendation will have much less of an impact on Ameritech Illinois' *existing* network than it will have on Ameritech Illinois' decision whether to invest in the further deployment of DSL-related Project Pronto facilities in Illinois. The type of investment that Ameritech Illinois plans to make in these DSL-related Project Pronto facilities only makes sense when the investing company has the ability to configure its offering in the most efficient way possible and obtain a market-required return on the investment. In fact, because of the high degree of regulatory uncertainty that exists regarding the terms and conditions that this Commission may impose on Ameritech Illinois' planned deployment of wholesale DSL services through Project Pronto, Ameritech Illinois has suspended its deployment/activation of DSL-related Project Pronto facilities (*i.e.*, Central Office OCDs and DSL-capable line cards) in this state.[1]

Putting aside momentarily the above legal and policy reasons why the Commission should not, and legally cannot, adopt the HEPAD's Project Pronto recommendation, the recommendation simply is not supported by the record. The Supreme Court, in *IUB II*, has made clear that Section 251(d)(2) of the Act—and correspondingly FCC Rule 317—places the burden of proof on the *requesting carrier* to affirmatively establish by objective, market-based evidence

[1] Ameritech Illinois plans to continue with the POTS only Project Pronto deployment in Illinois as part of its ongoing effort to improve service quality.

that the unbundling it seeks satisfies the requirements of Section 251(d)(2). *IUB II*, 525 U.S. at 392 (emphasis added). Disregarding the Supreme Court's directive, the HEPAD overlooks the fact that Rhythms and Covad have presented no market-based analysis and, indeed, no objective or quantitative market evidence whatsoever, to support their request to require Ameritech Illinois to unbundle DSL-related Project Pronto facilities. Rather, the HEPAD's Project Pronto recommendation relies solely on Rhythms and Covad's unsupported assertions that they somehow will be competitively harmed, or will face increased costs, if such Project Pronto facilities are not unbundled. Even if Rhythms and Covad had offered any proof for their assertion that, absent unbundling of such Project Pronto facilities, they would face increased costs (which they have not), such proof would be insufficient to support unbundling. Indeed, the Supreme Court has held that, in order to satisfy the burden of proof, a mere showing by the CLEC that a failure to unbundle would increase the CLEC's financial or administrative costs is not sufficient. *Id*. at 389-392.

In fact, the record establishes beyond question that, based on the options available in *today's* market for CLECs to provide DSL services to end-users, including the use of Ameritech Illinois' *existing* network as well as all other potential sources of supply (which is the applicable legal standard for applying the "necessary" and "impair" tests under Section 251(d)(2) of the Act), CLECs will not be harmed by Ameritech Illinois' planned deployment of DSL-related Project Pronto facilities. On the contrary, as the FCC found in its *Project Pronto Order*, Ameritech Illinois' planned offering of wholesale Broadband Services to CLECs over those facilities will provide those CLECs with an *additional* competitive option or platform for providing DSL services to end-users, and thus will provide CLECs with a benefit that they would not otherwise have.

For the reasons summarized above and set forth in greater detail below, the HEPAD's Project Pronto recommendation violates federal law in numerous respects and does not come even close to meeting the burden of proof established by the Supreme Court in *IUB II*. Accordingly, the Commission should reject the HEPAD's Project Pronto recommendation and instead revise the HEPAD to adopt Ameritech Illinois' position on that issue. Ameritech Illinois' proposed language changes to the HEPAD for this exception are set forth in Attachment A to this Brief on Exceptions.

I. THE HEPAD'S RECOMMENDATION TO UNBUNDLE PROJECT PRONTO AND ALLOW COLLOCATION OF LINE CARDS IS UNLAWFUL.

The HEPAD recommends that Ameritech Illinois be required to unbundle all of the piece parts and packet switching functionality of its Project Pronto facilities and allow CLECs to virtually "collocate" line cards in Project Pronto NGDLCs. HEPAD at 22, 26. These requirements violate the governing law. As we explain below, the HEPAD imposes on Ameritech Illinois obligations that do not exist under federal law (indeed, that the FCC expressly declined to impose), are counter to controlling FCC and appellate court decisions, and are the subject of ongoing proceedings in front of the FCC, in which the CLECs are actively participating.

The HEPAD violates controlling law for several reasons, most notably:

(1) the HEPAD would require Ameritech Illinois to unbundle packet switching functionality in circumstances where the FCC has already found that ILECs cannot be required to unbundle that functionality;

(2) the line cards that CLECs would virtually "collocate" are not and cannot be used for interconnection to Ameritech Illinois' network, as that term is defined under

the 1996 Act, or access to UNEs, and thus do not meet the collocation standards of Section 251(c)(6);

(3) the HEPAD would require Ameritech Illinois to combine UNEs for Rhythms and Covad, even though any such requirement is preempted by federal law because it would violate the plain language of the Act; and

(4) none of the new UNEs proposed by the HEPAD have been subjected to, much less passed, the "necessary and impair" and other tests required by Section 251(d)(2) of the Act and FCC Rule 317 (47 C.F.R. § 51.317).

It would require Ameritech Illinois to provide some UNEs that are not technically feasible to provide. To the extent the HEPAD recommends that Ameritech Illinois be forced to construct new facilities to unbundle for CLECs, it violates the plain language of the Act, which does not permit such requirements. The HEPAD's unbundling and line card collocation requirement also fails to apply the limitations that Section 261(c) places on a state's ability to impose obligations on an incumbent LEC. Finally, the HEPAD's unbundling recommendations conflict with the FCC's national policy framework for advanced services competition.

As a preliminary matter, the HEPAD's conclusion that the FCC's *Project Pronto Order*[2] does not prevent this Commission from ordering line card collocation or unbundling of Project Pronto facilities is incorrect. The HEPAD states (at 21) that the *Project Pronto Order* "is strictly limited to the issue of SBC/Ameritech ownership of certain advanced services equipment

[2] *See Ameritech Corp. and SBC Communications Inc., Petition for Consent to Transfer Control of Corporations Holding Commission Licenses and line Pursuant to Sections 214 and 310(d) of the Communications Act and Parts 5, 22, 24, 25, 63, 90, 95 and 101 of the Communications Rules,* Second Memorandum Opinion and Order, CC Docket 98-141. FCC 00-336 (rel. Sept. 8, 2000) ("*Project Pronto Order*").

otherwise prohibited by the Merger Order."[3] But the fact that the *Project Pronto Order* specifically rules on the ownership of line cards is precisely why the HEPAD's recommendation is unlawful and preempted. Indeed, the HEPAD's recommendation to allow CLECs to own or control and virtually collocate line cards in Ameritech Illinois' NGDLCs effectively nullifies the FCC's decision, which waived a condition of the FCC's SBC/Ameritech merger order specifically so that Ameritech Illinois, rather than CLECs, would be the one to own and control such cards. For this and the reasons stated below, the HEPAD should be revised in accord with Ameritech Illinois' exceptions.

A. THE HEPAD'S RECOMMENDATION TO UNBUNDLE PACKET SWITCHING FUNCTIONALITY VIOLATES THE PLAIN LANGUAGE OF FCC RULE 319.

The HEPAD's recommendation (at 21-22) to unbundle Ameritech Illinois' NGDLCs and a port on the OCD in the Central Office directly conflicts with – and thus is preempted by – the FCC's regulations and the *UNE Remand Order*. The HEPAD recognizes that it would require Ameritech Illinois to provide packet switching functionality on an unbundled basis and that the FCC created a specific regulation on such unbundling with the *UNE Remand Order*. Although the HEPAD refers to the FCC's packet switching rule, however, it misstates the rule and misapplies the four requirements that must be met before an ILEC can be required to unbundle packet switching functionality. The FCC's rule provides that:

> (B) An incumbent LEC shall be required to provide nondiscriminatory access to unbundled packet switching capability *only where each of the following conditions are satisfied*:

[3] The HEPAD also assumes that the D.C. Circuit's ruling on review of the FCC's SBC/Ameritech Merger Order means that the merger order "has been vacated" and that the Project Pronto Order "may no longer be effective either." HEPAD at 21. On January 18, 2001, however, the D.C. Circuit clarified its decision by stating that the FCC's merger order was only vacated "in part." *Association of Communications Enterprises v. FCC*, No. 99-1441 (D.C. Cir. Jan. 18. 2001). Thus, the HEPAD's assumption is incorrect. In any event, F.R.C.P. 60(b)(5) applies only to federal district court proceedings, not to administrative proceedings of federal agencies.

> (i) The incumbent LEC has deployed digital loop carrier systems, including but not limited to, integrated digital loop carrier or universal digital loop carrier systems; or has deployed any other system *in which fiber optic facilities replace copper facilities in the distribution section* (e.g., end office to remote terminal, pedestal or environmentally controlled vault);
>
> (ii) There are *no* spare copper loops capable of supporting the xDSL services the requesting carrier seeks to offer;
>
> (iii) The incumbent LEC *has not permitted* a requesting carrier to deploy a *Digital Subscriber Line Access Multiplexer* at the remote terminal, pedestal or environmentally controlled vault or other interconnection point, nor has the requesting carrier obtained a virtual collocation arrangement at these subloop interconnection points as defined by § 51.319(b); and
>
> (iv) The incumbent LEC has deployed packet switching capability *for its own use*.

47 C.F.R. § 51.319(c)(3)(B) (emphasis added). The record shows that the plain language of these four conditions has not been met and would not be met even if Ameritech Illinois deployed Project Pronto.

With respect to the first requirement, the HEPAD concludes that it has been met because Ameritech Illinois has deployed digital loop carrier systems. Although Ameritech Illinois has deployed such systems, the first requirement is not met unless such "fiber optic facilities *replace* copper facilities in the distribution section." The record establishes that Project Pronto is an *overlay* network that would *not* replace *any* existing copper facilities. Indeed, the deployment of Project Pronto would usually free up working copper loops for future CLEC use. Accordingly, the first requirement has not been met.

With respect to the second requirement, the HEPAD concludes that it has been met because "copper loops *will not always* be available." That disregards the plain language of the FCC's rule. The second requirement is met only if there "are *no* spare copper loops capable of supporting the xDSL services the requesting carrier seeks to offer." The requirement is not met

simply because some copper loops *might* not be available in *some* cases. Furthermore, a determination on whether this requirement has been met can be made only on a case by case basis to find out whether or not copper loops actually are available in a concrete, real-world situation. The Commission cannot simply impose a blanket requirement that Ameritech Illinois unbundle the packet switching functionality of the NGDLC and OCD even in cases where copper loops remain available.

With respect to the third requirement, the HEPAD concludes that is has been met because "the evidence demonstrates that Ameritech-IL will not voluntarily allow CLECs to collocate line cards with DSLAM capability in the NGDLC equipment at the RT." This interpretation of the rule and the evidence is entirely baseless. The FCC's Rule creates an *objective* test of whether an ILEC *permits* CLECs to collocate DSLAMs—*not* line cards—at the ILECs RTs. Whether the CLEC chooses to actually deploy those DSLAMs is entirely irrelevant. In other words, the FCC's rule provides that packet switching functionality need not be unbundled if the incumbent LEC allows CLECs to collocate their DSLAMs at certain points. It is undisputed that Ameritech Illinois has committed to allow such collocation at *all* of its RTs, both existing RTs and future RTs. Indeed, it is *required* to offer such collocation and more by the *Project Pronto Order* (¶¶ 34, 35, 61, and App. A at pp. 38-39). Specifically, under the *Project Pronto Order*, Ameritech Illinois will, upon a CLEC's request, either increase the size of existing and future RT structures or provide the CLEC with an adjacent cabinet structure. This should end the analysis. Furthermore, like the FCC's second requirement, this requirement would have to be analyzed on a case by case basis where a CLEC claims that collocation "has not [been] allowed." There is no evidence (or even a claim) of such a denial of collocation in a specific instance in this case. And there is no such denial of collocation simply because a CLEC makes a subjective determination

that it may be economically or operationally undesirable to collocate a DSLAM at a particular RT.

Moreover, the FCC's rule refers only to collocation of *DSLAMs*. A line card is not the same thing as a DSLAM; a DSLAM is a defined piece of equipment with stand-alone functionality, whereas a line card is merely a sub-component of a stand-alone piece of equipment (the NGDLC). Although the line card can, if combined with other equipment, provide some of the same functionality as a DSLAM, there can be no serious claim that a line card actually *is* a DSLAM. Thus, under the plain language of the FCC's rule there is no requirement that an incumbent LEC allow collocation of line cards as opposed to actual DSLAMs.

With respect to the fourth requirement, the HEPAD states that it has been met because Ameritech Illinois "is deploying Project Pronto for its own financial benefit." Again, the HEPAD misapplies the rule and ignores the facts. While Ameritech Illinois intends to benefit from its planned deployment of DSL-related Project Pronto facilities (otherwise, it would not invest in and deploy those facilities), the unrefuted evidence establishes that the DSL-related Project Pronto facilities that Ameritech Illinois plans to deploy would be *used by CLECs* in provisioning their own retail DSL services to end-users — Ameritech Illinois would not *use* these facilities because it does not provide retail DSL services. In short, Ameritech Illinois is not deploying packet switching equipment for its own use.

Thus, although the absence of any one of the four conditions in the FCC's rule would mean there is no duty to unbundle packet switching functionality, in this case none of the four conditions exist. Accordingly, the HEPAD's recommendation must be eliminated.

B. THE RECOMMENDATION TO ALLOW VIRTUAL COLLOCATION OF LINE CARDS DOES NOT COMPLY WITH SECTION 251(C)(6).

The HEPAD's recommendation that Ameritech Illinois be required to allow Rhythms and Covad to virtually collocate ADLU line cards in Project Pronto NGDLCs violates Section 251(c)(6) of the Act. Section 251(c)(6) allows collocation of only such equipment as is "[1] necessary for [2] interconnection or access to unbundled network elements." 47 U.S.C. § 251(c)(6). Line cards fail both tests. Further, these line cards have no independent functionality and therefore are not the type of equipment that qualify for collocation.

1. Line Cards Are Not Used for "Interconnection."

The FCC's rules define "interconnection" as "[1] the linking of two networks for [2] the mutual exchange of traffic." 47 C.F.R. § 51.5. Line cards are not and cannot be used for either purpose. To begin with, a line card is merely one sub-component of one physical part (the NGDLC) of the Project Pronto network and has no stand-alone functionality. The line card therefore is not a "network" in itself, nor is it connected to any CLEC-owned and operated equipment that makes up the CLEC's network. In a normal interconnection arrangement, by contrast, a CLEC and an ILEC typically will establish one or more "points of interconnection" between their networks at which the CLEC delivers traffic bound for Ameritech Illinois' customers and receives traffic from Ameritech Illinois bound for the CLEC's customers. Thus, the line card does not serve as the physical point for "the linking of two networks" as required by the FCC's rule. 47 C.F.R. § 51.5.

A line card also does not allow for the "mutual exchange of traffic" with Ameritech Illinois' network – as also required by the FCC's definition of "interconnection" – because the line card does not serve as a point where traffic is exchanged between Ameritech Illinois end-users and CLEC end-users. The line card is a mere conduit or pass-through point; traffic flows

through that point, but there is no "*mutual exchange*" of traffic with anyone else. The data traffic traveling through the line card, which is the CLEC's data traffic, is merely packetized before it continues traveling on the facilities between the RT and the Central Office. This again contrasts with the typical interconnection arrangement, where, once traffic passes to the other carrier, it becomes that carrier's responsibility. *See, e.g.*, Order, Ill. C.C. Dkt. No. 00-0027, at 17 (2000).

In fact, if a line card truly served as a point of interconnection to physically link two networks for the mutual exchange of traffic, then when the card immediately passed the traffic on to the facilities between Ameritech Illinois' RT and Central Office (assuming the line card had such functionality by itself, which it does not), the CLEC would have to pay Ameritech Illinois reciprocal compensation for transporting and terminating the traffic for the CLEC. The CLECs might argue that they would not have to pay reciprocal compensation for traffic that passed through the line card and onto the RT-to-Central Office facilities because, according to the CLECs, such facilities would be UNEs and thus part of the CLEC's network. But if that were true, of course, it would only further prove that a collocated line card does not provide interconnection of two networks. In other words, the CLECs would be claiming that the subloop, line card, NDGLC, and the rest of the Project Pronto facilities between the RT and the Central Office were all part of "their" network, meaning the line card was not the point of *mutual exchange* of traffic between *two* networks.

The HEPAD never acknowledges, much less analyzes, the FCC's definition of interconnection. Instead, it simply declares without further analysis that line cards are "the point of interconnection with the ILEC fiber-fed NGDLC network." HEPAD at 25. That conclusion ignores that "interconnection" is a defined term under the FCC's Rules and must be treated as such. The mere fact that a line card might be viewed by some as a point of "connection" with

Project Pronto facilities does not make it a point of "*inter*connection" of two networks for the mutual exchange of traffic. A line card could be used for *inter*connection only if it were a "network" in and of itself (which it is not, as a line cord is at best a network *element*) or the actual gateway to the CLEC's own "network" (which, as the HEPAD recognizes, it is not) *and* it performed the "mutual exchange" of traffic with Ameritech Illinois (which it does not).[4]

Moreover, even if a line card could be used for the mutual exchange of traffic between two networks (though it cannot), the card still would not be used for "interconnection" under the Act unless the traffic being exchanged was "local exchange or exchange access." 47 U.S.C. 251(c)(2)(A) (requiring ILECs to provide "interconnection" for "the transmission and routing of telephone exchange service and exchange access"). The xDSL services for which collocated line cards would be used are neither local exchange service nor exchange access service; rather, the FCC has said that they are "information access." *See* Memorandum Opinion and Order, *GTE Telephone Operating Companies, GTOC Tariff No. 1, GTOC Transmittal No. 1148*, 13 FCC Rcd 22466 (1998) ("*GTE ADSL Order*"); *Worldcom, Inc., et al. v. FCC*, Nos. 00-1001, 00-1062, 00-1070 (pending in D.C. Cir.), FCC Opening Brief at 30.

2. Line Cards Would Not Be Used to Access UNEs.

Project Pronto line cards also fail the collocation test of Section 251(c)(6) because they are not and cannot be used for gaining access to UNEs. As a threshold matter, as discussed below, none of the network elements that the HEPAD (at 24) seeks to unbundle actually qualify as UNEs under the Act, so access to such facilities is not access to UNEs. Furthermore, the

[4] The HEPAD also asserts that a virtually collocated line card is the same as a physically collocated DSLAM and splitter. HEPAD at 19. That is a false comparison. A line card is *not* a DSLAM. In contrast to a DSLAM, Ameritech Illinois would first have to combine the CLEC's line card with Ameritech Illinois' own network elements to create a new network element combination that the CLEC would then connect to the CLEC's own facilities at its collocation space in Ameritech Illinois' Central Office.

HEPAD's unexplained assumption (*id.* at 25) that line cards are "the means by which CLECs access subloops" has no record support and is plainly erroneous. Unbundled subloops are available at an RT only if the CLEC's collocated equipment (*e.g.*, the DSLAM) is cabled to the nearest cross-connect access point to those subloops (*e.g.*, the SAI cabinet), or to the "engineering controlled splice" referred to in Ameritech Illinois' voluntary commitments adopted in the *Project Pronto Order* (¶ 61). A CLEC cannot obtain access to subloops (or any other FCC-defined UNE) merely by virtually placing an ADLU card in Ameritech Illinois' NGDLC RT equipment, as there are no means to physically cross-connect the ADLU card to any UNE at the RT. Instead, the ADLU card can only be physically inserted into a slot within the NGDLC, at which point the card becomes an integrated part of Ameritech Illinois' NGDLC. Thus, unlike a DSLAM, which *can* be cabled to a cross-connect point in the RT because it truly is a stand-alone piece of equipment with its own functionality, a line card is merely a sub-component in the midst of integrated NGDLC equipment.

3. Line Cards Do Not Meet the "Necessary" Test for Collocation under Section 251(C)(6).

The fact that an ADLU card is not and cannot be used for interconnection or access to UNEs also means it is not "necessary" for those tasks, as required by Section 251(c)(6). But the line card would not pass the "necessary" test even if it could be used for either of those functions. The U.S. Supreme Court and the D.C. Circuit have made clear that the term "necessary," as used in the 1996 Act, must be given its ordinary and fair meaning. Of particular relevance here, this means that increased cost or decreased service quality alone cannot be deemed to create a "necessity." *IUB II*, 525 U.S. at 389-92 ("the [FCC's] assumption that any increase in cost (or decrease in quality) imposed by denial of a network element renders access to that element 'necessary' . . . is simply not in accord with the ordinary and fair meaning of th[at]

term[]"); *GTE Service Corp. v. FCC*, 205 F.3d 416, 422-23 (D.C. Cir. 2000) ("the FCC cannot reasonably blind itself to statutory terms in the name of efficiency").

The HEPAD blithely adopts the CLECs' loose and legally unsupported interpretation of the "necessary" standard, which assumes that collocation of equipment is "necessary" if (1) "the equipment is 'directly related to' interconnection or access to unbundled elements," and (2) "an inability to collocate such equipment would interfere with a CLEC's ability to compete effectively and efficiently." HEPAD at 25. That interpretation suffers from the very same defects as the FCC's interpretations of "necessary" that were overturned by the Supreme Court and D.C. Circuit. To begin with, the CLECs and HEPAD take the phrase "directly related to" from the D.C. Circuit's opinion but completely disregard the substance of the court's holding. The court did not use just the language quoted by the CLECs, but rather referred to equipment that was "directly related to and thus *necessary, required, or indispensable* to" interconnection or access to UNEs. *GTE Service Corp.*, 205 F.3d at 423. Thus, the term "necessary" must at least be limited to equipment that is "required' or "indispensable" to those purposes. *Id*. Indeed, a mere "directly related to" standard would no more comply with the 1996 Act than the FCC's illegally lax "used and useful" standard for collocation. *Id*. at 422-23.

The HEPAD never applies the "required or indispensable" standard endorsed by *GTE Service Corp.* Instead, after erroneously assuming that line cards can be used for interconnection or access to UNEs, the HEPAD focuses exclusively on whether the lack of an ability to collocate line cards would somehow "interfere with a CLEC's ability to compete effectively and efficiently" and concludes without any credible or quantitative evidence that it would, because the alternative, collocation of a DSLAM, is purportedly "expensive and entails consider[able] planning and delays." HEPAD at 25. That conclusion not only lacks evidentiary support but is

entirely irrelevant to the legal issue under Section 251(c)(6). For starters, the "necessary" test under Section 251(c)(6) has nothing to do with whether something is necessary to compete efficiently; the question is whether it is objectively "necessary" to achieve interconnection or access to UNEs, not whether it might be helpful for other purposes. *GTE Service Corp.*, 205 F.3d at 424.

Indeed, both *IUB II* and *GTE Service Corp.* soundly rejected any attempt to interpret "necessary" in terms of "presumed cost savings" or the impact on service quality. Yet, when the HEPAD finds that requiring Ameritech Illinois to permit CLEC collocation of line cards is appropriate because collocation of a DSLAM purportedly is "expensive and entails consider[able] planning and delays," it applies the very same "presumed cost savings" analysis rejected by those courts. The parallel could hardly be more striking. The FCC originally interpreted "necessary' under Section 251(d)(2) to mean that unbundled access to a network element was "necessary" whenever lack of access "could generate delay and higher costs for entrants" or "decrease the quality or increase the financial or administrative cost of the service a requesting carrier seeks to offer." *First Report and Order*, ¶¶ 283, 285. The Supreme Court rejected that interpretation as "not in accord with the ordinary and fair meaning" of "necessary." *IUB II*, 525 U.S. at 390. Likewise, when the FCC interpreted "necessary" under Section 251(c)(6) to include any and all equipment that was "used and useful" for interconnection, the D.C. Circuit reversed that interpretation because it was improperly based on "presumed cost savings" and thus "diverge[d] from any realistic meaning of the statute." *GTE Service Corp.*, 205 F.3d at 424 (internal quotation marks omitted). Thus, the HEPAD's attempt to revive the FCC's twice-rejected approach to the term "necessary" is impermissible.

4. Line Cards Are Not the Type of Equipment That Qualifies for Collocation.

The ADLU line card also is not the type of equipment that can or should be collocated under the governing FCC rules. The FCC's rules require the collocation of only complete items of equipment with stand-alone functionality. In every instance where the FCC has addressed collocation, it has described complete items of network equipment, not piece-parts or sub-components. *Advanced Services Order*, ¶ 28; 47 C.F.R. § 51.323(b). The line card, however, is not a complete item of equipment. Rather, it is only a sub-component of a complete item of equipment (the NGDLC).

The line card has no stand-alone functionality and no functionality at all until it is integrated with the rest of the software and hardware in the NGDLC system. The complete NGDLC physically consists of line cards; additional cards that provide common functions for multiple line cards; hardwired equipment such as the shelves, connectors, and wiring that house and interconnect all of the line cards and common cards; and the system software that makes all the NGDLC RT subcomponents operate as a complete equipment unit. A line card is simply inserted into one slot in a shelf within a complete NGDLC RT equipment unit. Significantly, however, the smallest increment of collocation equipment that the FCC has ever recognized is a "single shelf of equipment," which even the FCC indicated went beyond its existing collocation rules. *See Project Pronto Order,* App. A at 38 (noting that SBC ILECs would provide collocation in accordance with FCC rules, "except that" they would also "make space available [for collocation in an existing RT] in increments as small as a single shelf of equipment"). A line card obviously is a much smaller "increment" than a full shelf of equipment, as it takes up

only a single slot on a shelf. For these reasons, the line card is not the type of equipment that is appropriate for collocation.[5]

* * *

In short, the HEPAD's recommendation that Ameritech Illinois allow CLECs to virtually collocate of Project Pronto NGDLC line cards does not meet the requirements of Section 251(c)(6) for collocation. Accordingly, the Commission should reject the HEPAD's Project Pronto recommendation.

C. THE HEPAD'S ATTEMPT TO IMPOSE A UNE COMBINING REQUIREMENT ON AMERITECH ILLINOIS IS PREEMPTED BY FEDERAL LAW.

The HEPAD correctly recognizes that Ameritech Illinois cannot be required to combine UNEs for CLECs (*see* HEPAD at 21; *see also* HEPO in Docket 00-0393, at 27),[6] but incorrectly concludes that the virtual collocation of line cards at Ameritech Illinois NGDLCs would not require Ameritech Illinois to combine any network elements on behalf of a CLEC. HEPAD at 21. This conclusion rests on the CLECs' semantic obfuscation, which ignores the proper definition of terms under the 1996 Act and the way in which collocation and unbundling actually work.

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[5] Significantly, in the Project Pronto Order, the FCC agreed that an ADLU card is just a piece-part of equipment. Project Pronto Order, ¶ 4 n.11 (noting that "[a] plug-in ADLU Card is only one component of an NGDLC system"; "The ADLU card works in conjunction with other plug-in cards and software to provide [ADSL] service"; and that NGDLC systems also contain other equipment that provides "multiplexing, power, and other capabilities").

[6] The plain language of Section 251(c)(3) of the Act prohibits any requirement that incumbent LECs combine UNEs for CLECs. *Iowa Utils. Bd. v. FCC*, 219 F.3d 744, 758-59 (8th Cir. 2000) ("*IUB III*"), *cert. granted* (U.S., Jan. 22, 2001); *Iowa Utils. Bd. v. FCC*, 120 F.3d 753, 813 (8th Cir. 1997) (subsequent history omitted) ("*IUB I*"). This finding by the Eighth Circuit, acting in its role as a Hobbs Act reviewing court under 28 U.S.C. § 2342(1), cannot be collaterally attacked in any other forum (*see, e.g., FCC v. ITT World Comm., Inc.*, 466 U.S. 463, 468 (1984)) and is binding on state commissions. *Verizon North, Inc. v. Strand*, File No. 5:98-CV-38, slip op. at 13-14 (W.D. Mich., Dec. 5, 2000).

The HEPAD asserts that in a virtual collocation arrangement, although the line card will be owned by the CLECs, "for all other purposes [it will] be considered to be Ameritech's." HEPAD at 21. But that is just the point: Under the HEPAD it is Ameritech Illinois that would bear the responsibility (and cost) of taking the unbundled copper subloop and the unbundled OCD/NGDLC/lit fiber combination and combining those network elements with the CLEC's network element (the line card) in order to create the end-to-end combination of elements capable of supporting DSL services that the HEPAD requires (at 24) (referring to "any combination [of alleged UNEs] . . .including a line-shared xDSL loop from the OCD port to the NID").[7] This, by definition, is a new UNE combination.

The HEPAD recognizes that someone will have to combine network elements in order to provide an end-to-end combination of UNEs capable of supporting DSL services, but tries to sidestep that problem by asserting that "[b]ecause Covad and Rhythms will use their collocated equipment to access an unbundled loop, Ameritech-IL will not combine any network element on their behalf" and that "it will be Covad and Rhythms, not Ameritech-IL that will combine any network elements where CLECs own the line cards." HEPAD at 21. Unfortunately, however, that is not how things would play out in the real world for this type of equipment. As the HEPAD emphasizes, other than ownership, a virtually "collocated" line card would be "for all . . . purposes" the property of Ameritech Illinois, meaning that Ameritech Illinois alone would be responsible for combining the line card with other network elements to create an end-to-end combination. Rhythms and Covad would never and could never do the actual combining of a

[7] Although it may not intend such a result, the HEPAD's current "any combination" language on page 24 also would appear to require Ameritech Illinois to affirmatively combine its own network elements into any new UNE combinations of the CLEC's choosing, such as a UNE combination consisting of just an OCD port and a copper subloop between the RT and the end-user's premises. Such a result, of course, not only would be unlawful, but also impossible (and nonsensical). At a minimum, then, the "any combination" language should be revised or eliminated.

line card in an Ameritech Illinois NGDLC with other network elements, as Ameritech Illinois would be the one to manage and control the setup in its own NGDLC.

The core problem with this aspect of the HEPAD is its misuse of the term "collocation." As discussed above, a line card in no way qualifies as collocation equipment under Section 251(c)(6) and the FCC's rules. Thus, if the HEPAD were factually accurate, it would recognize that a CLEC's line card is not collocation equipment, but is merely a CLEC network element. Once that is understood, it becomes clear that what the HEPAD would require is that Ameritech Illinois combine the CLEC's network element (the line card) with Ameritech Illinois' network elements to create an end-to-end combination. The line card is just another point in the path of the end-to-end combination of network elements that ultimately will terminate at the CLEC's collocated equipment in an Ameritech Illinois Central Office.

The HEPAD's mischaracterization of line cards as collocation equipment is the result of the CLECs' semantic ruse. They know that they have no right to act as co-designers of Ameritech Illinois' network, and thus have no right to insert their own sub-component of equipment in the middle of Ameritech Illinois' equipment and expect Ameritech Illinois to integrate it into Ameritech Illinois' network. So the CLECs attempt to simply redefine the line card as some kind of "mid-loop collocation" equipment and claim that anything on either side of that equipment is a separate UNE that Ameritech Illinois must combine with the card. Such a scheme is unknown in the world of collocation, where equipment that is used to truly access UNEs does so for the purpose of connecting those UNEs to the CLEC's own network, not for the purpose of intervening between two UNEs to create an end-to-end network element combination that the CLEC *then* connects to its network at a different point (*i.e.*, the Central Office).

For these reasons, the HEPAD's attempt to avoid the bar on requiring incumbent LECs to combine network elements for CLECs fails. No matter how one looks at it, the HEPAD ultimately would require Ameritech Illinois to combine network elements for Rhythms and Covad. Any such requirement violates the plain language of the 1996 Act.

D. THE NEW UNES THAT THE HEPAD RECOMMENDS BE ESTABLISHED HAVE NOT PASSED THE ACT'S AND THE FCC'S TESTS FOR UNBUNDLING AND THEREFORE ARE ILLEGAL.

In one swoop, the HEPAD recommends that Ameritech Illinois be required to unbundle almost as many new UNEs as currently exist in the FCC's entire national list. These are:

a. Lit Fiber Subloops between the RT and the OCD in the CO consisting of one or more PVPs ("permanent virtual paths") and/or one or more PVCs ("permanent virtual circuits") at the option of the CLEC;

b. Copper Subloops consisting of the following segments:

   i. the copper subloop from the RT to the NID at the customer premises;

   ii. the copper subloop from the RT to the SAI ("serving area interface");

   iii. the copper subloop from the SAI to the NID at the customer premises.

c. ADLU line cards owned by the ILEC in the NGDLC equipment in the RT;

d. A port on the OCD in the CO; and

e. Any combination thereof, including a line-shared xDSL loop from the OCD port to the NID.

HEPAD at 24.

The HEPAD's recommendation to unbundle every piece of the Project Pronto network is unlawful because none of these alleged new UNEs have been subjected to, much less passed, the mandatory "necessary," "impair," and other tests of FCC Rule 317, which apply to any state-imposed unbundling requirement. 47 C.F.R. § 51.317(b)(4); *UNE Remand Order*, ¶ 154. The

HEPAD's attempt to create new "Project Pronto UNEs" must therefore be rejected for a number of reasons.

1. The creation of UNEs that were never identified or analyzed on the record violates due process and the PUA.

As a threshold matter, the HEPAD created this list of UNEs out of thin air. The CLECs never identified in testimony the specific UNEs that they asserted should be unbundled. Because the specific Project Pronto UNEs were never addressed by any party, there is no record evidence on a UNE-by-UNE basis as to which components of the Project Pronto network should or could be unbundled. There was argument as to whether *in general* it would be a good idea to "unbundle Project Pronto," but that cannot support any of the specific unbundling requirements recommended by the HEPAD, which could only be imposed after a fact-intensive analysis under Rule 317. To suddenly impose a list of specific UNEs that have not been addressed or analyzed in record evidence by any party is therefore both (1) a violation of due process, which requires notice and an opportunity to be heard before new burdens can be imposed, and (2) a violation of Section 10-103 of the PUA, which requires decisions to be supported by and based on actual facts in the record. 220 ILCS 5/10-103; *East St. Louis Federation of Teachers v. East St. Louis School Dist. No. 189, Financial Oversight Panel,* 178 Ill.2d 399, 419-20) (1997); *Alton & S. R. Co. v. Commerce Comm'n*, 316 Ill. 625 (1925).

2. The HEPAD failed to apply the mandatory legal tests to any of the alleged new UNEs.

It is beyond debate that every alleged UNE must be analyzed separately and on its own merits to determine whether it meets the definition of a "network element," and, if so, whether it passes the "necessary," "impair," and other standards for unbundling under Section 251(d)(2) and Rule 317. The HEPAD contains no such analysis for the specific UNEs it recommends be established, nor could the required analysis be conducted on the barren record here. The

HEPAD refers to the "impair" test in general terms (*see* HEPAD at 22-23), but Rule 317 analyses must be searching and "fact intensive" and demand much more than generalized allegations about Project Pronto as a whole. *See UNE Remand Order*, ¶¶ 62, 142. The HEPAD's failure to apply the unbundling tests to each of the new UNEs it requires is arbitrary and capricious and violates federal law.

3. The HEPAD misapplied the Rule 317 tests by relying on speculation about the future rather than existing market conditions.

In addition to failing to analyze each alleged UNE separately, which by itself means that the new unbundling requirements are legally defective, the HEPAD misapplies the "necessary" and "impair" tests to DSL-related Project Pronto facilities as a whole. Section 251(d)(2) and Rule 317 require a "fact intensive" analysis that "consider[s] the totality of the circumstances," including market conditions and the availability of alternatives to the UNE. *UNE Remand Order*, ¶¶ 62, 142. Specifically, the unbundling determination must be "[b]ased on the actual state of competition." *UNE Remand Order*, ¶ 23. The HEPAD, however, fails to consider the "totality of the circumstances" or market conditions as they exist today. Rather, the HEPAD disregards Ameritech Illinois' Broadband Service Offering and traditional forms of line-sharing as alternatives to unbundling, and bases its decision on an entirely speculative analysis of what *might* happen in the *future*.

For example, the HEPAD assumes that there are no viable alternatives to unbundling Project Pronto because Ameritech Illinois, in the future, *might* somehow decide to provide the Broadband Service Offering to its affiliate, AADS, but not to CLECs (which Ameritech Illinois could not do under the Act's nondiscrimination requirements), thereby denying CLECs the ability to provide xDSL services to customers with loops in excess of 18,000 feet. Specifically, the HEPAD asserts: "If Ameritech-IL is permitted to deny access to CLECs, then no carrier

other than Ameritech-IL will be able to provide xDSL services to those customers with loops in excess of 18,000 feet." HEPAD at 23-24. This position ignores the "actual state of competition" and the "totality of the circumstances" in the market today, including the fact that Ameritech Illinois does not and never has provided xDSL services to end-users. *UNE Remand Order*, ¶ 23.

Moreover, the Broadband Service Offering will provide CLECs with the ability to provide xDSL service on loops of more than 18,000 feet, and even do so at *UNE rates* (*Project Pronto Order*, App. A. at p. 35), meaning there is no economic difference to a CLEC between using the Broadband Service Offering or the HEPAD's newly-defined slate of UNEs.

The HEPAD's assertion also does not make sense. Even assuming that Ameritech Illinois were free to withdraw the Broadband Service Offering (which, as explained below, it is not), it would make no economic sense to do so, because such withdrawal would apply equally to AADS as to any other CLEC. Moreover, as noted above, Ameritech Illinois cannot, does not, and never has provided any retail DSL services. Accordingly, Ameritech Illinois clearly would not have an opportunity to become the "monopoly provider of advanced services," as the HEPAD assumes.[8]

The HEPAD's refusal to acknowledge the competitive options available to DSL service providers *today*, as well as the undeniable fact that Ameritech Illinois' planned deployment of DSL-related Project Pronto facilities will not limit any of these existing options but will instead

[8] The Broadband Service Interim Agreement does not give Ameritech Illinois the ability to withdraw the offering for any reason. The contract only allows Ameritech Illinois to change, modify, or withdraw the offering as a result of regulatory developments. There is no credible evidence to suggest that Ameritech Illinois could or would terminate the service offering in the future for any other reason. And the evidence is uncontroverted that the cited contract language was principally directed at SBC's then-pending OCD/NGDLC line card ownership waiver request then pending before the FCC, which the FCC subsequently granted in its *Project Pronto Order* on condition of providing the Broadband Service Offering. In short, to the extent that the HEPAD is correct in speculating about possible *future* market conditions and competitive options for xDSL service providers, rather than the market conditions and competitive options that exist today, there simply is no reason to exclude the Broadband Service from the potential group of viable alternatives to unbundling Project Pronto that will be available to CLECs in the future if Ameritech Illinois were to deploy its DSL-related Project Pronto facilities as it originally planned.

provide CLECs with an *additional* option or platform for providing DSL services to the mass market, is inexplicable. For example, the HEPAD relies on the unsubstantiated concern that Ameritech Illinois *might* retire its copper plant in the future. The HEPAD states:

> SBC has made very short-term commitments that home run copper will continue to be available as a means of line sharing. Should Ameritech IL begin to phase out its copper loops, and continue to refuse line sharing over its Project Pronto network, Ameritech IL could effectively bar all other providers from large segments of the potential market for xDSL based services."

HEPAD at 24. Again, this assertion ignores the market conditions as they exist today. Access to the HFPL over copper facilities is one of several viable options for CLECs and will continue to exist at least until (and as a factual matter, well beyond) September 2003. Moreover, under the FCC-adopted commitments and the *Project Pronto Order* (App. A at p. 41), Ameritech Illinois must continue to follow its established copper retirement policy. Under this policy, decisions to remove copper cable are not affected by the deployment of the Project Pronto network overlay, and are not affected by the current users of these copper facilities (whether by Ameritech Illinois' retail customers, affiliated telecommunications carriers, or unaffiliated telecommunications carriers). In fact, the commitments require that Ameritech Illinois not retire, through September 2001, any central office terminated copper loops overlaid by the Project Pronto architecture, except as required by acts of God. *Project Pronto Order*, App. A at p. 41. Additionally, Ameritech Illinois is prohibited from using its retirement policy through September 2003 to retire more than 5% of its total CO-terminated copper loops in service as of September 1, 2000. Accordingly, there is no reason to exclude copper facilities from the group of competitive options for providing DSL services available to CLECs today.

The HEPAD also claims that CLECs will not be able to use Central Office-based copper loops to provide DSL service once Ameritech Illinois deploys its Project Pronto DSL facilities because of alleged "cross-talk" problems. HEPAD at 24. This assertion is, again, purely

speculative. Although the issue of potential "cross talk" problems is being considered by various bodies, no regulatory or industry body has concluded that such a problem will in fact occur. Moreover, even if such "cross-talk" problems are found to potentially exist, there is nothing to suggest that a solution would not be found. Significantly, if potential problems were found to exist, the same problem would exist every time a CLEC collocated a DSLAM at an RT. In other words, the problem would arise from CLECs' as well as ILECs' placement of facilities at an RT and would affect all DSL providers equally. In those circumstances, the industry likely would find a solution.

The Commission cannot properly unbundle Project Pronto based on unsubstantiated speculation that *in the future* Ameritech Illinois *might* not offer the Broadband Service, *might* retire its copper plant, or that cross talk problems *might* occur. The FCC has stated that an unbundling determination must be "[b]ased on the *actual* state of competition." *UNE Remand Order*, ¶ 23 (emphasis added). As the market currently stands, home-run copper loops (or the HFPL of those loops), DSLAM collocation at RTs (and copper subloops or the HFPL of those subloops) and CLEC self-provisioning are all viable options for CLECs to provide DSL services.

Moreover, even assuming that the HEPAD's assumptions could come true in the distant future (which has absolutely no factual support), the Commission still could not lawfully require Ameritech Illinois to unbundle Project Pronto *now*. Rather, if the events that the HEPAD speculate *could* happen in the future were ever come to pass, the Commission would have to make an unbundling determination *at that time* based on then-prevailing market conditions, then-prevailing alternatives to unbundling, and the then-prevailing totality of the circumstances. *See UNE Remand Order*, ¶¶ 149-51 (noting that FCC would revisit its unbundling rules periodically in the future to account for changed conditions). In short, unless and until a proposed new UNE

passes the tests of FCC Rule 317 based on a fully developed record and intensive factual analysis of the *current* market, the Commission has no power to require an incumbent LEC to provide it. 47 C.F.R. § 51.317(b)(4).[9]

The evidence available concerning current market conditions overwhelming establishes that it is not proper to unbundle Project Pronto. Although we will not reiterate our analysis of the factors to be applied when making an unbundling determination, which are set forth in the *UNE Remand Order* (¶¶ 101-15) (cost, timeliness, quality, ubiquity and impact of network operations)[10], the bottom line is that the record lacks *any* of the objective, quantitative market-based facts (such as the CLECs' actual costs, the CLECs' actual prices, and the cost and price structure of the market as a whole or of other market participants) necessary to conduct the type of in-depth analysis, considering all potential sources of supply, that both *IUB II* and the *UNE Remand Order* mandate. The HEPAD's conclusion that the Act's "impair" standard has been met lacks credible evidentiary support. It is based on subjective, unsubstantiated claims by CLECs that their business "needs" will not be met, and their ability to execute their business plans will somehow be harmed, if the Commission does not require Ameritech Illinois to deploy on an unbundled basis its planned DSL-related Project Pronto facilities. Accordingly, the HEPAD's conclusion violates the federal requirement that the Commission must conduct a comprehensive, objective, *market-based* factual analysis of the *current* environment. *UNE Remand* Order, ¶ 23.

[9] It is also important to note that the applicable market, the Advanced Services market, includes not only DSL technologies but other technologies as well (such as DBS, wireless, and cable modem technologies). Accordingly, a proper Rule 317 analysis would have to identify and evaluate the options available to advanced services providers using these other technologies as well.

[10] As Ameritech Illinois has explained, analysis of these additional factors only confirms that the necessary and impair standards have not been met and therefore this Commission cannot lawfully unbundle Project Pronto.

Besides improperly resting its analysis on Project Pronto as a whole and on speculation about the future, the HEPAD also makes several assertions that cannot be squared with the law or the facts. To begin with, the HEPAD maintains that unbundling is necessary because without it CLECs might be able to use different kinds of line cards to provide different kinds of xDSL service. HEPAD at 23-24. That overlooks two things: (1) the Project Pronto NGDLCs that Ameritech Illinois plans to deploy are today capable of using ADLU line cards only, which means that all CLECs alike could only provide ADSL services (*i.e.*, those available with an ADLU card) (*see Project Pronto Order*, App. A. at p. 36); and (2) to the extent that the NGDLC manufacturer develops, and Ameritech Illinois were to deploy, other types of line cards in the future, such cards could be used with the Broadband Service Offering, which will ensure that all CLECs will have the exact same ability to provide all services that actually have been deployed over the Project Pronto architecture. *See id*., App. A at p. 37. Thus, the HEPAD is incorrect in assuming there could be a gap in the range of xDSL services that could be offered by CLECs as compared to those available through Ameritech Illinois' Project Pronto facilities. Moreover, as discussed later in this brief, irrespective of which carrier owns the cards (ILEC or CLECs), the technology chosen to be deployed by SBC in connection with Project Pronto has certain attributes and limitations and Ameritech Illinois cannot be obligated to deploy a superior network in order to make available unbundled access to the CLECs (even assuming that it was appropriate to unbundle the SBC ILEC's Broadband Service offering, which it is not).

Although the HEPAD acknowledges that collocation of DSLAMs at RTs could be a viable option for CLECs providing DSL service, it gives no weight to such DSLAM collocation because it asserts that such collocation would be "costly" and "takes considerable time to deploy." HEPAD at 23. That conclusion not only lacks evidentiary support, it conflicts with the

FCC's analysis in the *UNE Remand Order*. In deciding whether packet switching functionality needed to be unbundled, the FCC found that unbundling was not necessary so long as incumbent LECs allow collocation of DSLAMs at RTs, even though the FCC recognized the alleged "costs and delays" of obtaining such collocation. *UNE Remand Order,* ¶ 309. The Commission has no basis for departing from that analysis here, even if one were to assume that it lawfully could do so.

The HEPAD then contends that unbundling is necessary because otherwise Ameritech Illinois might attain a "monopoly" position in advanced services. HEPAD at 23. Nothing in the record supports such an assumption (which again is based on speculation about the future rather than current market conditions). To the contrary, the record firmly establishes that the lion's share of the advanced services market is dominated by technologies other than DSL technology, such as cable modem services and wireless services. Unlike Ameritech Illinois, the providers of the competing technologies are not regulated in any meaningful way. Accordingly, Ameritech does not have and could not obtain any "monopoly power" in the advanced services market. Indeed, after conducting a fact-intensive investigation, the FCC explicitly held that ILECs "do not retain a monopoly position in the advanced services market," which is the only pertinent market here. *UNE Remand Order,* ¶ 308. Likewise, the mere fact that an ILEC owns or plans to own a facility – especially a facility that in most cases has not yet been deployed – does not automatically make that facility a "bottleneck." Indeed, the FCC certainly would not have allowed the SBC ILECs to own line cards in the *Project Pronto Order* if it viewed them as a true "bottleneck" facility. As the FCC stated, "[m]erely owning and operating equipment used to provide advanced services does not, by itself, evidence a violation of the Act or our rules." *Project Pronto Order,* ¶ 7. Congress and the Supreme Court also have recognized that, rather

than assuming that all ILEC facilities are bottlenecks, regulators must perform a fact-intensive investigation and analysis of existing market conditions before they can force the unbundling or sharing of any part of an ILEC's network. *See* 47 U.S.C. § 251(d)(2); *IUB II*, 525 U.S. at 386-92; *see also GTE Service Corp.*, 205 F.3d at 422-23.

E. THE HEPAD'S PROJECT PRONTO RECOMMENDATION THREATENS TO REQUIRE AMERITECH ILLINOIS TO BUILD NEW FACILITIES SOLELY TO SERVE CLECS, IN VIOLATION OF *IUB I* AND *IUB III*.

The HEPAD correctly concludes that Ameritech Illinois cannot be required to change its architecture or method of deploying Project Pronto facilities solely to benefit CLECs, as any such requirement would violate the Eighth Circuit's holding, acting as the Hobbs Act court, that incumbent LECs are not required to build or install facilities just for CLECs. *IUB III*, 219 F.3d at 757;[11] *IUB I*, 120 F.3d at 813. The HEPAD states:

> The Commission agrees with Ameritech-IL that it will generally not be required to deploy a superior network to benefit its competitors. . . . The CLECs are not requesting at this time the deployment of additional or superior equipment to the Project Pronto network currently being deployed. Rather, the CLEC's [sic] are requesting the provision of a virtual path over the Project Pronto architecture, as it is provisioned, nothing more.

HEPAD at 22. On its face, that conclusion seems lawful, but that dissipates in the real world. If the HEPAD remains as is, Ameritech Illinois would have to purchase and install additional fiber, NGDLCs and OCDs due to the serious inefficiencies that would result from the HEPAD's Project Pronto recommendation. Thus, the ultimate impact of the HEPAD is to require Ameritech Illinois to deploy more and different facilities than Ameritech Illinois would for itself. This violates the law.

[11] The Commission should note that although the Supreme Court granted certiorari on other issues in *IUB III*, it denied certiorari on the "superior quality" issue, meaning that on this issue the *IUB III* decision is now the final and non-appealable law of the land.

F. SOME OF THE HEPAD'S NEW UNBUNDLING RECOMMENDATIONS ARE NOT TECHNICALLY FEASIBLE.

In addition to all of the legal deficiencies discussed above, the HEPAD's attempt to identify the specific elements that it recommends be unbundled in the Project Pronto network would force Ameritech Illinois to unbundle network elements that simply cannot be unbundled as a technical matter. For example, the HEPAD, among other things, appears to recommend the unbundling of lit fiber (which carries numerous end-users' telecommunications traffic) on the end-user customer side of the OCD. Just as is the case with "shared transport" in the circuit-switched world (which the FCC has found cannot be physically separated from local switching), it is not technically possible to physically separate lit fiber from the end-user customer "side" of the ATM switch at the Central Office, the OCD.

As explained by Mr. Lube, a single end user's DSL service will not occupy a consistent end-to-end path through the Project Pronto architecture, or have a consistent interface at each end of the path. Consequently, the physical parts of this architecture used to provide DSL service to an end user will not bear a one-to-one correspondence to one another throughout the DSL service's path. When a CLEC provides DSL service to a single end user using the Broadband Service, the single end user's DSL service will be partially a physical path and partially a virtual path through these various network components. Therefore, the end user's DSL service can be physically accessed in some parts of the end-to-end path, but cannot be physically accessed in other parts. In particular, the end user's DSL service *cannot* be accessed as a specific, unique unbundled network element on the "fiber" side of the OCD switch. In fact, the only accessible "port" on the OCD is on the Central Office-side of the OCD, *after* the DSL signal has been processed by the OCD switch. As noted above, in this regard, lit fiber can be compared to shared transport, which the FCC has stated cannot, as a technical matter, be

provided separately from local switching. *UNE Remand Order*, ¶¶ 371-72. It therefore is not technically feasible to provide lit fiber as a UNE. Further, once it is understood that lit fiber could only be provided in conjunction with the OCD port, the HEPAD again violates the law because, as explained above, the OCD is a packet switch and cannot legally be required to be unbundled in the manner that the HEPAD recommends.

G. THE HEPAD'S PROJECT PRONTO UNBUNDLING/LINE CARD COLLOCATION RECOMMENDATION IMPROPERLY FAILS TO APPLY SECTION 261(C) OF THE ACT.

With respect to its unbundling rulings, the HEPAD refers to the "necessary" and "impair" standards of Section 251(d)(2), determines that only the "impair" standard applies, and then determines that the "impair" test requires that CLECs obtain unbundled access to the Project Pronto network. HEPAD at 22-24. The HEPAD then concludes that line cards fit the definition of equipment that is "necessary" for interconnection or access to UNEs under Section 251(c)(6). *Id*. at 24-26. In applying these analyses (which are addressed above), the HEPAD completely fails to address, or even mention, the requirements of Section 261(c) of the Act, which provide that a state can impose only such requirements on carriers as are "necessary to further competition in the provision of telephone exchange service or exchange access" and are "not inconsistent with this part or the Commission's regulations to implement this part." These requirements are mandatory and incremental to those in Sections 251(d)(2) and (c)(6).[12] This failure to consider controlling law, which was addressed in detail in Ameritech Illinois' briefs, is

[12] The "necessary" test in Section 251(d)(2) applies only to proprietary network elements and for purposes of unbundling; the "necessary" test of Section 251(c)(6) applies only to the factual question whether collocation of certain equipment is truly necessary for interconnection or access to UNEs. The "necessary" test of Section 261(c) asks a third question, which deals with whether a regulatory requirement is truly indispensable to promoting competition.

by itself arbitrary and capricious. Moreover, the outcome would have been different if the HEPAD had considered Section 261(c).

Section 261(c)'s "necessary to further competition" standard does not give state commissions a blank check. Rather, it must be subjected to "some limiting standard, rationally related to the goals of the Act." *See IUB II*, 525 U.S. at 391. The "necessary" requirement also cannot regard any increased cost or decreased service quality as creating a necessity. *Ibid.*; *GTE Service Corp.*, 205 F.3d at 422-23. But that is precisely what the HEPAD does. Putting aside the HEPAD's speculation about what the market might look like in the future, the *only* analysis in the HEPAD for why Project Pronto facilities should be unbundled relates to the purported increased cost or decreased quality of service that CLECs may experience (which analysis, in any event, is based on unproven and factually wrong assumptions) – the very reasons the courts have held are improper. Specifically, the HEPAD asserts that, although collocation of DSLAMs in RTs is one option available to CLECs providing DSL service, it purportedly would be expensive and time-consuming. HEPAD at 23. The HEPAD also asserts, without any evidentiary basis, that CLECs do not have the financial resources to deploy Project Pronto-like DSL facilities. *Ibid*. Additionally, the HEPAD asserts, again without any evidentiary basis, that a collocated DSLAM might not permit the provision of service equivalent in quality to a xDSL service provisioned using collocated NGDLC line cards. HEPAD at 23-24. Even if these assertions were supported by evidence and proven true, none of them are sufficient to justify unbundling Ameritech Illinois' DSL-related Project Pronto facilities, because they relate purely to cost and service quality. This threshold misapplication of the "necessary" standard requires rejection of the HEPAD's Project Pronto recommendation.

Nor could the HEPAD's Project Pronto recommendation stand even if the Commission properly interpreted the "necessary" standard of Section 261(c). In view of the commitments, including the Broadband Service commitments, made by SBC and incorporated by the FCC as conditions in the *Project Pronto Order*, there is no way that the Commission could lawfully conclude that the HEPAD's Project Pronto recommendation is factually "necessary to further competition in the provision of telephone exchange service or exchange access." The record establishes that the Project Pronto architecture does not have to be unbundled for CLECs to be able to offer DSL services to end users. In the *UNE Remand Order* (¶ 307), the FCC stated that "the record in this proceeding, and our findings in the 706 Report, establish that advanced services providers are actively deploying facilities to offer advanced services such as xDSL across the country. … [C]arriers have been able to secure the necessary inputs to provide advanced services to end users in accordance with their business plans. This evidence indicates that carriers are deploying advanced services to the business market initially as well as the residential and small business markets." *UNE Remand Order*, ¶ 307.

Significantly, Ameritech Illinois' Broadband Service Offering would provide CLECs with a *new* method to offer DSL services to end-users, in addition to all of the *existing* methods already available to CLECs today. Indeed, the record establishes that, if Ameritech Illinois were permitted to deploy its DSL-related Project Pronto facilities in the manner that it intended and the FCC contemplated in the *Project Pronto Order*, CLECs would have a variety of options for offering DSL services, including the following:

(1) The CLECs could utilize Ameritech Illinois' Broadband Service offerings. In doing so, CLECs would be able to utilize the DSLAM functionality of the Project Pronto NGDLC equipment to provide DSL services without having to collocate their own stand-alone DSLAMs at RT sites.

(2) CLECs could also continue to utilize all-copper loops to provide DSL services. Because Project Pronto is an overlay network design, Ameritech

Illinois' existing copper facilities would still be available to CLECs. Also, because the Project Pronto architecture would allow an end user's POTS and ADSL service to be provided over that architecture, use of the Broadband Service offerings by other CLECs would free additional existing copper facilities that were previously used only for POTS.

(3) CLECs could choose to collocate their own stand-alone DSLAM equipment in Ameritech Illinois' RT sites, where space is available and other technical requirements (*e.g.*, heat dissipation, power, etc.) are met.

(4) CLECs could build their own facilities to provide DSL services to end users.

Given these options, unbundling of Project Pronto clearly does not meet the "necessary" standard of Section 261(c).[13]

It is equally clear that the HEPAD's Project Pronto recommendation does not meet Section 261(c)'s requirement that the state obligation be consistent with the Act and applicable FCC rules. The HEPAD's recommendation (1) conflicts with the FCC's holding in the *UNE Remand Order* that ILECs are not required to unbundle packet switching (as described above); (2) conflicts with the FCC's *Project Pronto Order*, which allows ILECs to own, install and operate line cards used with Project Pronto NGDLCs (as described below); and (3) conflicts with the Eighth Circuit's decisions in *IUB I* and *IUB III*, which hold that ILECs are not required to combine UNEs or build new facilities for or provide superior quality service to CLECs (as described above).

In summary, Section 261(c) limits a state commission's authority to impose additional unbundling or collocation obligations on telecommunications carriers beyond those established by federal law. The HEPAD's failure to even apply this provision is by itself reversible error. Moreover, a state law requirement to unbundle DSL-related Project Pronto facilities and allow

[13] Moreover, as noted above, the HEPAD's Project Pronto recommendation does not relate to the provision of telephone exchange service or exchange access. Rather, it relates to the provision of DSL services, which the FCC has classified as "information access."

line card collocation could not meet the standards of Section 261(c) in any event and therefore cannot be lawfully imposed by this Commission.

H. THE HEPAD'S RECOMMENDATIONS IMPERMISSIBLY CONFLICT WITH THE FCC'S NATIONAL POLICY FRAMEWORK.

The HEPAD's Project Pronto recommendation conflicts with the Act and the national framework for promoting advanced service deployment and competition. The Supreme Court made clear in *IUB II* that, under the 1996 Act, state commissions must regulate "in accordance with federal policy." *IUB II*, 525 U.S. at 378 n.6. Under well-established principles of law, state regulation is preempted where it "'stands as an obstacle to the accomplishment of the full purposes and objectives of Congress' — whether that 'obstacle' goes by the name of 'conflicting; contrary to;…repugnance; difference; irreconcilability; inconsistency; violation; curtailment;…interference,' or the like." *Geier v. American Honda Motor Co.*, 120 S. Ct. 1913, 1921 (2000) (ellipses in original) (quoting *Hines v. Davidowitz*, 312 U.S. 52, 67 (1941)). As the FCC has noted, "[a]mong the fundamental goals of the Telecommunications Act of 1996 . . . is the promotion of innovation, investment and competition among all participants and for all services in the telecommunications marketplace, including advanced services."[14]

The *Project Pronto Order* and *UNE Remand Order* establish the current national framework for promoting advanced services deployment and competition. The FCC has determined that allowing the SBC ILECs – not CLECs – to own and control line cards used with Project Pronto NGDLCs is in the public interest and is the best means for promoting advanced services deployment and competition, provided that the SBC ILECs offer CLECs end-to-end

[14] *In the Matter of Deployment of Wireless Services Offering Advanced Telecommunications Capability*, CC Docket Nos. 98-147, 98-11, 98-26, 98-32, 98-78, 98-91, FCC 99-413 (rel. December 23, 1999) (citing Joint Statement of Managers, S. Conf. Rep. 104-230, 104th Cong. 2d Sess. 1 (1996)).

wholesale Broadband Services over the Project Pronto facilities and satisfy other procompetitive commitments. *Project Pronto Order*, ¶¶ 1-2.

More specifically, the FCC expressly found in its *Project Pronto Order* that "allowing SBC's incumbent LECs to own, install, and operate" the line cards used with Project Pronto NGDLCs, subject to the terms and conditions set forth in the Order, will promote the pro-investment and procompetitive objectives of the Act set forth above. *Project Pronto Order*, ¶¶ 1-2, 10. In particular, the FCC concluded that ILEC ownership and control over line cards would "speed the deployment of ADSL service availability to 77 million customers" across the country, while at the same time giving CLECs an "immediate opportunity to compete against SBC in the mass market," including by "differentiating their product offerings." *Id.*, ¶ 23. The FCC further added that the "immediate deployment of advanced services to consumers in SBC's regions . . . provides a significant benefit that we believe must be considered in our public interest analysis." *Id*. And the FCC expressly found that allowing SBC ILECs to own and control line cards "should affirmatively and identifiably promote the rapid deployment of advanced services in a pro-competitive manner, thereby serving the goals of section 706." *Id.* As the FCC explained, its line card ruling "paves the way for Rhythms and other carriers to compete" for the estimated 20 million potential customers who would not be able to receive DSL service but for SBC's voluntary – and discretionary – decision to roll out Project Pronto at this time. *Id*., ¶ 28. Finally, the FCC emphasized the "wide array of choice" that will be available to consumers "[b]y unleashing the full potential of the [Project Pronto] equipment" and the "innovative, exciting new services" that SBC and competing LECs will provide in the years to come. *Id*., ¶ 42, 45.

The FCC's *Project Pronto Order* establishes as a matter of federal law that ILEC ownership and control of line cards, when coupled with the speedy deployment of Project Pronto and the pro-competitive commitments made by the SBC ILECs in connection with such ownership, is the FCC's chosen means to promote the achievement of Congress' purposes and objectives under the Act. Indeed, if the FCC thought otherwise – *i.e.*, if the FCC thought that ILEC ownership of line cards were neutral or negative with respect to the accomplishment of Congress' goals – the FCC would not have found that waiver of the Merger Order conditions to permit ILEC ownership of line cards serves the public interest and promotes innovation and competition.[15]

The HEPAD takes an approach to advanced services competition that is directly at odds with the approach in the FCC's rulings and therefore is preempted. Indeed, the HEPAD's Project Pronto recommendation clashes head on with the FCC's decision that, on the whole, the Act's purposes are best served if the SBC ILECs are allowed to own those line cards. Adoption of the HEPAD's recommendation would therefore stand "as an obstacle to the accomplishment off the purposes and objectives of Congress" and is preempted under established Supreme Court doctrine. More specifically, if this Commission were to require Ameritech Illinois to permit collocation of CLEC line cards, the Commission would effectively nullify the waiver granted by the FCC.

Although Rhythms and Covad assert, and the HEPAD appears to agree, that the *Project Pronto Order* did not implicitly reject their line card collocation proposal, that assertion simply is wrong. The FCC expressly declined to adopt the CLECs' line card collocation proposal,

[15] The HEPAD incorrectly states, "during the oral argument on rehearing on January 18, 2001, counsel for Ameritech-IL acknowledged that SBC/Ameritech has the unfettered right to discontinue use of the separate affiliate." This misrepresents counsel's statements and is wrong. Indeed, counsel for Ameritech Illinois represented quite the opposite. Rehearing Tr. at 649-650.

which the CLECs had specifically urged the FCC to impose in numerous *ex partes* that those CLECs filed with the FCC in the *Project Pronto* proceeding. Instead, the FCC found in its *Project Pronto Order* that "allowing SBC's incumbent LECs to own, install, and operate" the line card used with Project Pronto NGDLCs, subject to the terms and conditions set forth in the Order, would promote the pro-investment and pro-competitive objectives of the Act set forth above. *Project Pronto Order*, ¶¶ 1-2, 10. Moreover, the CLECs are requesting reconsideration from the FCC on the very same collocation proposal that they are advocating in this case. *See Petition For Reconsideration Of Competitive Telecommunications Association*, CC Docket No. 98-141, ASD file No. 99-49 (filed October 10, 2000). Clearly, such a request for reconsideration would not be necessary if the FCC had left the door open for CLECs to own and collocate line cards to be used in the Project Pronto architecture, as the CLECs suggest and the HEPAD wrongly concludes in this case. The CLECs are simply forum shopping in the hope that the Commission will reach a different decision than the FCC. In short, the HEPAD's Project Pronto recommendation clashes head on with the FCC's controlling decision that, on the whole, the Act's purposes are best served if the SBC ILECs are allowed to own the Project Pronto NGDLC line cards. The HEPAD's recommendation with respect to Project Pronto must be rejected because it is plainly inconsistent with the FCC's national policy framework.

Additionally, as a legal matter, the Commission cannot impose on Ameritech Illinois further unbundling obligations that the CLECs, by seeking rehearing of the *UNE Remand Order*, the *Line Sharing Order* and the *Project Pronto Order*, have already conceded are not currently required by the FCC. Collateral attacks on FCC orders that are subject to direct review are not permitted under the governing law. *FCC v. ITT World Comm., Inc.*, 466 U.S. 463, 468 (1984);

Wilson v. A.H. Belo, Inc., 87 F.3d 393, 399-400 (9th Cir. 1996); *Michigan Bell Tel. Co. v. Strand*, 26 F.Supp.2d 993 (W.D. Mich. 1999).

Moreover, from a policy perspective, it would be unwise for the Commission to rule on these issues when the FCC is still evaluating them. The CLECs have already sought reconsideration from the FCC on these issues and, in fact, that is the only lawful way for them to challenge the FCC's determination. The Commission should not allow the CLECs to forum shop by bringing those issues to this Commission in the hope that it will give them something that the FCC already has declined to give them. Even worse, the CLECs are bringing their claims here even though the FCC is currently considering their proposals for additional unbundling in connection with the CLECs' petitions for reconsideration and with separate, pending, further proposed rulemaking proceedings.

II. THE HEPAD'S PROJECT PRONTO RECOMMENDATION IS UNSOUND FROM A TECHNICAL AND POLICY PERSPECTIVE.

A. ADOPTION OF THE HEPAD'S PROJECT PRONTO RECOMMENDATION WOULD CREATE SEVERE TECHNICAL AND OPERATIONAL PROBLEMS THAT WOULD MAKE FURTHER DEPLOYMENT OF DSL-RELATED PROJECT PRONTO FACILITIES IN ILLINOIS ECONOMICALLY UNATTRACTIVE.

In addition to the myriad legal flaws of the HEPAD's Project Pronto recommendation, that recommendation is fundamentally unsound from a policy perspective, as it would serve only to reduce, rather than enhance, investment, innovation, and ultimately competition in the advanced services market. Indeed, in the rehearing phase of this docket, Staff has stressed that the Commission should not impose obligations on Ameritech Illinois that would unduly reduce Ameritech Illinois' incentive to continue deployment of Project Pronto in Illinois.[16] Unfortunately, the HEPAD's Project Pronto recommendation will have precisely that effect, at

[16] Staff Ex. 1.0 (Clausen) at 2; Tr. at 95-96.

least with respect to further deployment of Project Pronto facilities on the end-user "side" of the network designed to support the provision of DSL services.

Among other things, although the Commission's original Arbitration Decision correctly recognized that severe operational and technical problems would occur if CLECs were allowed to *physically* collocate Project Pronto NGDLC line cards (and therefore rejected the CLECs' request for such physical collocation), the HEPAD (like the Arbitration Decision preceding it) fails to recognize that these same operational problems would exist even if CLECs were allowed only to virtually collocate line cards. The record on rehearing establishes that CLEC ownership and collocation (whether physical or virtual) of Project Pronto NGDLC line cards will create severe operational problems, introduce inefficiencies into Ameritech Illinois' network, and cause Ameritech Illinois to incur substantial additional costs, none of which would exist if Ameritech Illinois were simply allowed to own the line cards, as authorized by the FCC's *Project Pronto Order*. As we explain below, one of the most serious operational problems that would result is the premature exhaust of the NGDLC system itself, both in terms of physical capacity limitations and bandwidth capacity limitations. In addition, a number of serious provisioning and maintenance problems would result if CLECs were permitted to own or designate and collocate their own ADLU line cards.

As a matter of policy, this Commission should be hesitant to impose new regulations on a single potential supplier in an emerging, competitive market—the market for advanced services—that could very well distort market outcomes in an undesirable way, by compelling excessive, technologically inefficient use of one firm's innovation and assets by other market participants. Yet this is exactly what the HEPAD's Project Pronto recommendation would do. That recommendation would threaten to force Ameritech Illinois to reconfigure the Project

Pronto architecture in a manner that would be inefficient, more costly, and ultimately provide no additional benefits to CLECs, consumers or Ameritech Illinois. The operational problems that the HEPAD's Project Pronto recommendation would create would so dramatically change the economics of Ameritech Illinois' planned deployment of DSL-related Project Pronto facilities that Ameritech Illinois might be forced to forego the further deployment of those facilities in Illinois altogether. Ameritech Illinois hopes to avoid that result. However, as noted above, because of the high degree of regulatory uncertainty surrounding this issue, Ameritech Illinois has suspended its further deployment of any wholesale DSL-related Project Pronto facilities.[17]

More broadly, to the extent that it reflects the Commission's regulatory approach to efforts by an ILEC to invest in its network to offer new services and enter into new markets, the HEPAD's Project Pronto recommendation would have a chilling effect on similar investments by Ameritech Illinois and other ILECs, both now and in the future.[18]

1. Allowing CLECs to collocate line cards would create physical capacity limitations that likely would result in premature exhaust of the NGDLC system.

Allowing CLECs to own or control and collocate Project Pronto ADLU line cards would result in inefficient use of the Project Pronto DSL-related facilities on the end-user side of the network, which ultimately could cause premature exhaust of the NGDLC system. To fully understand how these inefficiencies would occur, it is necessary to understand the particulars of the equipment deployed with Project Pronto.

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[17] Nonetheless, as indicated above, Ameritech Illinois plans to continue with the POTS only Project Pronto deployment in Illinois in its ongoing effort to improve service quality.

[18] Notably, competing providers of broadband capable architectures (*e.g.*, cable modem providers) are not subject to the type of regulatory requirement recommended by the HEPAD. Imposing such a requirement on Ameritech Illinois would ultimately mean one thing—consumers would have fewer choices.

As the record on rehearing establishes, the NGDLC RT equipment has a limited number of slots to hold line cards. Specifically, in the Alcatel Litespan NGDLC equipment that Ameritech Illinois is deploying in RTs under Project Pronto, each channel bank used for DSL service has 56 slots. The largest cabinet configuration for the Litespan system contains 9 channel banks, 3 of which are capable of supporting DSL service in a fully equipped system. This equates to a maximum of 168 ADLU card slots per RT capable of supporting DSL service. Each slot in turn has 4 ports, totaling a maximum 672 DSL-capable ports per RT. Because each of the line card slots in the RT can serve four individual customer lines, each line card slot has four copper feeder pairs hardwired to it. Am. Ill. Ex. 7.0 (Keown) at 6-7.[19]

Port-by-port ownership or control by different carriers in a NGDLC channel bank assembly is not feasible because each line card contains multiple ports, *i.e.*, the ADLU line card serves multiple end-user customers. Accordingly, under the HEPAD's line card collocation recommendation, each CLEC would own and deploy its own set of line cards, and it is highly *un*likely that any CLEC would voluntarily share with other CLECs the ports on a single line card. Rather, each CLEC would reserve the unused slots on each of its line cards solely for its own use. Accordingly, under the HEPAD, ADLU line card ownership would have to be determined and tracked on a line card-by-line card basis.

This type of arrangement is plainly inefficient. If each of many CLECs (which easily could exceed 10 or more CLECs per RT) owned or controlled its own multi-port line cards in a particular RT, and therefore had exclusive use of all the ports on those line cards, but only had one customer in the specific geographic area served by that RT, then the other port capacity of

[19] The ADLU line cards currently manufactured by Alcatel support only 2 DSL ports per line card, which means the current maximum DSL capacity of a Litespan 2000 system is 336 DSL-capable ports. Alcatel is in the process of developing a DSL-capable line card that supports 4 ports.

that CLEC's line cards would be unused. In other words, unless all CLECs used all of the ports on each of their collocated line cards (an unlikely scenario), inefficient utilization of the NGDLC's slot and port capacity would result. Am. Ill. Ex. 7.0 (Keown) at 7-8. In contrast, if Ameritech Illinois owned all the line cards used in its NGDLC RT equipment, as authorized by the FCC in its *Project Pronto Order*, this inefficient utilization would not occur, as Ameritech Illinois could assign the next available DSL port to whatever CLEC was then ordering DSL service. In short, Ameritech Illinois would be able to assign ports on the same card to multiple CLECs on a port-by-port basis, and thereby more efficiently manage the port capacity of its NGDLCs. Am. Ill. Ex. 7.0 (Keown) at 12.[20]

The inefficient underutilization of NGDLC slot and port capacity that would result from CLEC ownership and collocation of line cards is critical, because it would limit the number of feeder pairs available for POTS customers (because more channel bank capacity would be occupied by the unused or partially used line cards of multiple CLECs), as well as limit the number of CLECs that could provide DSL service using Project Pronto NGDLCs. The underutilization of the Project Pronto NGDLC RT also would hasten exhaust of the slot capacity of the NGDLC equipment itself. This would be detrimental to all CLECs and the ILEC, because it would create the need for additional capital investments to deploy more NGDLC RTs, and

[20] Attachment JEK-2 to Mr. Keown's Direct Testimony on Rehearing illustrates the maximum number of unused line card ports that would exist under Ameritech Illinois ownership of Project Pronto NGDLC line cards, versus CLEC ownership or control of the line cards. Under this example, assuming that there are 5 SAIs per RT and 3 different types of line cards, Ameritech Illinois ownership of the line cards would result in a maximum of 45 unutilized ports. In contrast, if 5 different CLECs were collocating line cards to provide DSL service throughout the serving area of that RT, the maximum amount of unutilized ports would be 225. Moreover, assuming the existence of the largest cabinet configuration for the Litespan NGDLC RT equipment, even if every port of every slot were fully utilized except the last slot per card type, per SAI, per CLEC, the resulting utilization under Ameritech Illinois ownership of the line cards would be over 93%, compared to less than 67% if the assumed 5 CLECs owned or controlled and collocated line cards in the RT. Although the CLECs claim that this example is the "worst case scenario" (Tr. at 279), in reality this is the worst case scenario only if no more than five CLECs owned and controlled line cards in the RT and no more than 3 different types of line cards existed. As Mr. Keown explained, this underutilization problem would be exacerbated as more CLECs owned or controlled and collocated line cards in an RT and as the variety of those line cards increased. Am. Ill. Ex. 7.0 (Keown) at 8-9.

likely cause delays in delivering service to end-user customers associated with the provisioning and installation of those additional NGDLC RTs. Am. Ill. Ex. 7.0 (Keown) at 6-7.

The bottom line is that, if multiple CLECs are permitted to collocate their own line cards (or line cards that they designate) and those CLECs do not use all four of the copper pairs that are wired to each line card slot (which non-use is highly likely), there would be inefficient use of the NGDLC slot capacity, and as a result, significantly higher equipment costs per DSL line. This type of network inefficiency and increased costs would not occur if Ameritech Illinois owned the line cards, because Ameritech Illinois could assign multiple CLECs to the same line card on a port-by-port basis. In fact, this is exactly how Ameritech Illinois currently plans to provision its wholesale Broadband Service offerings.

The HEPAD attempts to address this exhaust problem by requiring CLECs that place line cards in Ameritech Illinois' NGDLCs to begin paying all charges as if all ports were being fully utilized. The HEPAD asserts that this requirement "provides CLECs with an economic incentive to order only the capacity they will use and avoids wasting parts [sic]." While this requirement is laudable, it will not solve the exhaust problem. Unless every CLEC has customers in multiples of four, there would still be an increase in the number of unused ports, and hence the inefficient use of those NGDLC facilities (and the risk of stranded or exhausted capacity) would correspondingly increase. Moreover, the record establishes that, because all the copper pairs wired to a line card slot would be going to the *same*, *small* serving area, it is unlikely that, in a multiple CLEC environment, any single CLEC would obtain enough customers to utilize all four pairs wired to the line card slot. Tr. at 281. And even if this were not the case, all of the other network inefficiencies introduced by multiple CLEC line card ownership would still exist.

2. Allowing CLECS to collocate line cards would create bandwidth limitations that likely would result in premature exhaust of the NGDLC system.

In addition to physical exhaust of the slots in the NGDLC system, CLEC ownership and collocation of line cards would increase the risk of premature exhaust of the system's bandwidth. The most common DSL/ATM quality of service (QoS) classes are Constant Bit Rate (CBR), Variable Bit Rate, both real time and near real time (VBR-rt, VBR-nrt), and Unspecified Bit Rate (UBR). The quality of service classes offered over Ameritech Illinois' DSL-related Project Pronto facilities will have a significant impact on the availability of bandwidth. Ameritech Illinois is currently offering UBR quality of service over the Project Pronto DSL-related facilities, and its business plans for deploying those facilities assume extensive use of the UBR quality of service. Ameritech Illinois chose to deploy UBR because UBR permits all customers to have an equal chance at the bandwidth resources of the NGDLC, and provides the most efficient use of the shared bandwidth of the NGDLC RT, *i.e.*, it provides access to that shared bandwidth to the greatest number of customers. As Staff's witness, Mr. Clausen, acknowledged, SBC designed its deployment of DSL-related Project Pronto facilities primarily to serve the mass market with high speed Internet access. Staff Ex. 1.0 (Clausen) at 5. Unlike other QoS classes, UBR is ideally suited to serve this purpose. In fact, UBR is the only ATM class of service that the Alcatel Litespan 2000 NGDLC system currently supports. UBR allows more customers to be assigned over the NGDLC and the shared fiber facility than could be assigned under any other quality of service class. Am. Ill. Ex. 7.0 (Keown) at 13; Tr. at 238-239.

In contrast to UBR QoS, CBR and VBR QoSs provide a guaranteed level of service (*i.e.*, a minimum or specific level of "reserved" bandwidth). In other words, in terms of bandwidth allocation within an ATM network, CBR and VBR services are allocated specific levels of bandwidth at the expense of UBR customers. With UBR QoS, the entire bandwidth is available

to all customers on a first-come, first-served, "best efforts" basis. However, with CBR or VBR QoS, even though the total amount of bandwidth would remain the same, portions of the bandwidth would be dedicated to certain customers to the exclusion of UBR customers, thereby leaving UBR customers with less bandwidth to share. Am. Ill. Ex. 7.0 (Keown) at 13-14. In light of these differences, it is clear that implementing CBR or VBR QoS on Project Pronto DSL-related facilities would result in a number of adverse consequences on those facilities.

The most serious adverse impact would be on the shared fiber between the RT and the OCD. More specifically, with CBR and VBR QoS, the facility carrying the DSL signal could exhaust the bandwidth capacity of the OC3c before the ports exhaust, which in turn could lead to a negative service impact on those customers using UBR. For example, the OC3c between the RT and the OCD has 155 megahertz of bandwidth. With UBR QoS, approximately 3000 customers can obtain DSL (ADSL) service over an OC3c without negatively impacting the service of any customer. Because the largest cabinet configuration being deployed by Ameritech Illinois in its NGDLC RTs will have a maximum capacity of 672 DSL lines, the OC3c has enough capacity to handle all of those DSL lines. In contrast, with CBR or VBR, each customer is guaranteed a specified amount of bandwidth on the facility. If each CBR or VBR customer is "given" 1.5 megahertz of bandwidth, only 100 lines would be able to share the OC3c facility. In that case, only about 15% of the DSL slot capacity of the NGDLC RT facility could be used (100/672), as compared to the total capacity useable on a UBR QoS basis. Am. Ill. Ex. 7.0 (Keown) at 14-15.

Such inefficient use of Project Pronto NGDLC facilities would make no sense, would create the need for additional capital investments sooner than would otherwise be necessary, and also could result in delays in providing service to end-user customers associated with the

provisioning and installation of additional (and otherwise unnecessary) NGDLC facilities. Significantly, as Staff witness Mr. Clausen conceded during cross-examination (Tr. at 131-133), it is only Ameritech Illinois, and no other party, that would bear the risk that these additional (and otherwise unnecessary) investment costs would become obsolete or otherwise stranded.[21] If, as a result, Ameritech Illinois were to conclude that these additional costs and expenditures would potentially render its investment uneconomic, it might justifiably conclude, in Justice Breyer's words, that "the game was not worth the candle" (*See IUB II*, 525 U.S. at 430) and forego any further deployment of DSL-related Project Pronto facilities in Illinois.

Although the HEPAD recognizes the risk of bandwidth exhaust and recommends that CLECs only be allowed to use UBR QoS (until such time as Ameritech Illinois' data affiliate begins offering a product based upon a different QoS), the HEPAD incorrectly asserts that there is "substantial evidence on the record illustrating the types of actions telecommunications providers normally take to increase available bandwidth." HEPAD at 26. To the contrary, the record on rehearing establishes that the capacity of the lit fiber running between the NGDLC and the OCD cannot be increased merely by changing the ADLU line card in the Litespan equipment (either the Litespan 2000 NGDLC or the Litespan 2012 NGDLC). Nor would changing the common card that converts the DSL signals from electrical to optical increase the available DSL bandwidth. Am. Ill. Ex. 7.0 (Keown) at 15-16.

Moreover, the HEPAD's assertion (at 26) that there are different ways for Ameritech Illinois to increase bandwidth across the Project Pronto OCD-to-NGDLC fiber system

[21] To strike a balance between the bandwidth limitations in the Project Pronto network and the CLECs' desire for new and different services, SBC, in its commitments to the FCC, set forth a framework for implementing additional features and functions of the Project Pronto equipment. These commitments, included, among other things, establishing a collaborative process on identifying the features and functions desired by the CLECs, a process for deploying new features and functions in response to CLEC demands, and deployment of a CBR offering. However, each of these commitments includes a reasonable process for protecting the finite resources of the Project Pronto facilities.

(presumably including deploying additional RTs; deploying more Litespan 2012 systems instead of Litespan 2000 systems; purchasing additional equipment to perform wave division multiplexing; and unchaining channel banks from the OC3c), overlooks the fact that these options are either technically or economically unattractive to Ameritech Illinois. Tr. 389-396.

More specifically, the first two options, deploying additional RTs and utilizing more Alcatel Litespan 2012 systems instead of Litespan 2000 systems, are very costly. Tr. at 390. It would be a waste of resources for Ameritech Illinois to deploy additional RTs or additional Alcatel Litespan 2012 systems when such deployment otherwise would be unnecessary if Ameritech Illinois were permitted to deploy the DSL-related Project Pronto facilities in the manner that it contemplates. This is especially true given the fact that only Ameritech Illinois would bear the risk that such additional investment costs would be stranded.

With respect to the third option (wave division multiplexing), the record on rehearing establishes that changing the common card in the Litespan NGDLC system will not enable wave division multiplexing ("WDM") or dense wave division multiplexing ("DWDM"). Rather, to provide WDM or DWDM, Ameritech Illinois would have to purchase additional, costly equipment that would lead to a higher price for the CLECs. Am. Ill. Ex. 7.0 (Keown) at 15-16. Putting aside the cost of this additional equipment, both WDM and DWDM raise issues relating to service provisioning, testing, and test access, all of which would make use of these technologies unattractive or infeasible from Ameritech Illinois' perspective. Tr. at 390.

The fourth option, unchaining channel banks from the OC3c, is equally undesirable to Ameritech Illinois as an economic matter. Although the Litespan NGDLC equipment is capable of supporting more than one OC3c between the RT and the Central Office if the NGDLC channel banks are unchained from the OC3c, such unchaining would require placement of

additional fiber, thereby increasing costs, or using more of the available fibers at the NGDLC RT sites, thereby decreasing the available dark fibers for those CLECs that might want to collocate their own stand-alone equipment at the RT site. In addition, each of these additional OC3c fiber facilities must terminate on the OCD in the central office. These additional fiber facilities would cause the ports on the OCD to exhaust faster, which would require the deployment of more OCDs than otherwise would be necessary, again resulting in higher costs. Am. Ill. Ex. 7.0 (Keown) at 17; Tr. at 392.[22]

3. Allowing CLECS to collocate line cards would adversely impact Ameritech Illinois' provisioning of service to both CLECs and end-users.

Allowing Rhythms and Covad to own or designate and collocate NGDLC line cards would also adversely impact Ameritech Illinois' provisioning of service to both CLECs and end-users. Specifically, Ameritech Illinois' provisioning intervals for DSL service almost assuredly would be longer if CLECs were permitted to own and collocate NGDLC line cards, as compared to Ameritech Illinois owning the line cards and provisioning Broadband Services in the manner set out in the FCC's *Project Pronto Order*. The record on rehearing establishes that, if CLECs were permitted to own and collocate line cards, the typical provisioning steps would be as follows:

1. The CLEC would first identify the end-user customer(s) to be served.
2. The CLEC would request "loop qualification" information to determine what facilities were available to serve that end-user customer.

[22] For example, if there are 20 RTs in a wire center, chained OC3cs would require 20 OC3c ports at the Central Office OCD. If all the channel banks were unchained in a typical 3 DSL channel bank per RT configuration, 60 OC3c ports would be needed at the OCD. This triples the number of OCD ports that would be needed, and would require additional OCDs to be purchased and installed. The additional OCDs and fibers would add unnecessary and inefficient costs to the services being provisioned over the Litespan architecture. Moreover, as noted previously, if CLECs could offer each customer 1.5 MB CBR or VBR service, each OC3c would have the capacity to carry only about 100 DSL lines. This means that, even if two additional OC3cs and OCDs were added, less than 50% of the available DSL ports at the RT would be utilized. Am. Ill. Ex. 7.0 (Keown) at 17.

3. If a Project Pronto NGDLC was the available serving facility, a collocation application would have to be filed for "slot" space.

4. The CLEC would then place an order to ship a line card to Ameritech Illinois.

5. Ameritech Illinois would receive the line card from the CLEC.

6. Ameritech Illinois would then confirm receipt of the line card with the CLEC.

7. Ameritech Illinois would then dispatch a technician to the RT and install the line card for the CLEC.

8. Ameritech Illinois would confirm installation of the line card with the CLEC.

9. The CLEC would then place a service order to establish service to the end-user customer.

10. Because Ameritech Illinois' provisioning systems as they exist today would not contain information regarding which line cards were owned or controlled by what CLECs, the service order would have to be handled manually to ensure proper assignment of the DSL service to the CLEC's slot and port.

Once the proper facilities were assigned and the service order completed, confirmation would then be sent back to the CLEC that DSL service can be provisioned to the end-user. Am. Ill. Ex. 7.0 (Keown) at 9-10.

The HEPAD discounts the testimony of Mr. Keown by asserting that he admitted during cross-examination that many of these steps, such as dispatching the technician to install the card and confirming installation of the card, would occur regardless of whether Ameritech Illinois or the CLEC owned the card. This assertion is wrong. To the contrary, Mr. Keown testified that, if Ameritech Illinois owns the line card, "there is no [installation] confirmation needed. Because the card being owned by Ameritech, the inventory is in the Ameritech systems, and when the service order came through, it would be provisioned automatically." Tr. at 286. Moreover, with respect to dispatching a technician, although technicians have to be dispatched at some point

when Ameritech Illinois owns the line cards, Mr. Keown explained that the problem with CLEC ownership was the overall number of times technicians actually would have to be dispatched: "I think the difference is how often do you send the guy out . . . Do I send him out once every six months or do I send him out once a day or once every five hours." Tr. at 301. Indeed, if Ameritech Illinois owns the NGDLC line cards, it could pre-provision many cards at one time. However, if the CLECs own the NGDLC line cards, Ameritech Illinois would have to dispatch a technician each time a CLEC desires to collocate a line card. The number of dispatches would only increase as more and more CLECs requested collocation of more and more line cards. Similarly, because end-users customers move and change service providers, the number of trips required to rearrange the cards at the NGDLC or replace one CLEC's card with another CLEC's card also would increase.

The bottom line is that requiring Ameritech Illinois to perform these additional provisioning steps each time a CLEC submits a DSL-related service order, merely to satisfy Rhythms and Covad's desire to own and collocate Project Pronto NGDLC line cards, simply makes no sense. Clearly, performing these additional provisioning steps would not result in any conceivable benefit to CLECs or consumers. Equally clearly, these additional provisioning processes would unnecessarily lengthen Ameritech Illinois' provisioning intervals and costs, which is undesirable from any perspective, be it that of Ameritech Illinois, a CLEC, or an end-user. In contrast, if Ameritech Illinois is permitted to own its NGDLC line cards and provision wholesale Broadband Services in the manner that the FCC's *Project Pronto Order* authorizes and contemplates, Ameritech Illinois can pre-equip its NGDLC equipment to support whatever wholesale DSL services that it provides, thereby improving service provisioning flows and intervals. Am. Ill. Ex. 7.0 (Keown) at 12.

4. Allowing CLECs to collocate line cards would create serious service maintenance and repair problems.

In addition to the economic, operational and provisioning problems described above, allowing Rhythms and Covad to own or designate and virtually collocate line cards likely would create serious service maintenance and repair problems. More specifically, CLEC ownership or control of line cards would add a new challenge and unnecessary complexity to the maintenance and repair process. In the case of the ADLU line card used in the Litespan NGDLC equipment, and indeed, in the case of most NGDLCs, ADSL is the only DSL service that currently is available. With ADSL, if the CLEC provides only the data service, Ameritech Illinois would be the POTS provider. Since both the voice signal and the data signal travel together over the same copper subloop from the end user to the ADLU card, a defective ADLU card can create service problems either in the voice path or the data path. If the ADLU line card needs to be changed, the CLEC would have to provide a maintenance spare to change out the defective line card. Tracking these maintenance spares would place undue responsibility on Ameritech Illinois. This would become particularly onerous if multiple CLECs with various types of line cards were to collocate them in Ameritech Illinois' NGDLC RTs. Ameritech Illinois' maintenance and repair technicians would be required to identify the owner or designator of the line card, determine whether that owner or designator had provided a maintenance spare, locate that spare, or place a call or order to the owner or designator to provide a spare. This likely would increase the mean time to repair on both the POTS side and the data side of the end-user's service, which would mean longer out-of-service conditions, greater customer dissatisfaction, and a greater number of service-related complaints to this Commission. Am. Ill. Ex. 7.0 (Keown) at 10-11.

It is important for the Commission to recognize that the potential problem that Ameritech Illinois would face on the maintenance and repair front does not involve merely tracking and

locating one type of spare line card for a single CLEC. Rather, the problem would involve tracking and resolving these repair and maintenance issues for multiple CLECs with multiple types of line cards that they may have collocated in a multitude of Ameritech Illinois' NGDLC RTs. To manage the shipping and handling of the resulting large volume of line cards to thousands of possible RT locations for multiple CLECs would be a massive and unreasonable burden to place on Ameritech Illinois. Am. Ill. Ex. 7.0 (Keown) at 11.[23] The potential magnitude of these maintenance and repair problems provides yet another compelling reason for the Commission to reverse its original NGDLC line card collocation requirement and instead allow Ameritech Illinois to own the NGDLC line cards and provision wholesale Broadband Services as contemplated by the FCC in the *Project Pronto Order*.

5. Adoption of the HEPAD's Project Pronto recommendation would make deployment of DSL-related Project Pronto facilities in Illinois unattractive and would discourage future investment in Illinois.

As described above, adoption of the HEPAD's Project Pronto recommendation would threaten to force Ameritech Illinois to deploy and use its DSL-related Project Pronto facilities in a manner that it did not intend and, more importantly, in a manner that would be costly and inefficient. As noted above, while Ameritech Illinois has started deployment of Project Pronto DSL-related facilities in Illinois, it has not yet done so on a widespread or significant basis. Accordingly, the HEPAD's Project Pronto recommendation will have much less of an impact on Ameritech Illinois' *existing* network than it will have on Ameritech Illinois' decision whether to invest in the further deployment of DSL-related Project Pronto facilities in Illinois. The type of investment that Ameritech Illinois plans to make in these DSL-related Project Pronto facilities only makes sense when the investing company has the ability to configure its offering in the

[23] Additionally, if Ameritech Illinois is allowed to own the Project Pronto NGDLC line cards, service problems of one CLEC will be less likely to interfere with service of any other CLEC. Am. Ill. Ex. 7.0 (Keown) at 12.

most efficient way possible and obtain a market-required return on the investment. Indeed, one of Ameritech Illinois' incentives for investing in Project Pronto is the efficiencies that can be gained in the Project Pronto network. Am. Ill. Ex. 8.1 (Chapman) at 2. The HEPAD, however, improperly assumes Ameritech Illinois should develop its investment plans in a manner that suits the CLECs' business plans, regardless of the financial consequences to Ameritech Illinois and its investors. Instead of encouraging CLECs to invest in their own facilities, the HEPAD sends CLECs the economically inefficient message that they can direct how Ameritech Illinois will invest in its facilities. Of course, only Ameritech Illinois would bear the risks associated with its investment. Accordingly, the HEPAD's Project Pronto recommendation, unless rejected, will only discourage, instead of encourage, Ameritech Illinois' continued investment in DSL-related Project Pronto facilities.

As noted above, efficiency is a key driver of Ameritech Illinois' planned deployment of Project Pronto facilities and is captured in Ameritech Illinois' proposed Broadband Services price structure. Introducing inefficiencies into the network (as the HEPAD's Project Pronto recommendation would do) would increase Ameritech Illinois' cost of deploying these facilities and, as a result, the prices of the Broadband Service, or of the new Project Pronto UNEs provided in lieu of the Broadband Service, also would increase. The increased deployment costs not only would increase Ameritech Illinois' investment risk, it also may, by virtue of the resulting higher pricing, make the Broadband Service and new Project Pronto UNEs less attractive to CLECs.[24] The higher prices may cause fewer CLECs to purchase the UNEs or the

[24] Significantly, Staff witness Mr. Clausen agrees that Ameritech Illinois' investment risk and ability to generate a return on its Project Pronto investment would be impacted if the Commission were to create a CLEC right to virtually collocate line cards. Tr. at 108-109.

service, which, in turn, means that Ameritech Illinois would run a higher risk of being unable to recover its cost of deploying these facilities.

This problem is not resolved by the fact that Ameritech Illinois still would be able to charge TELRIC prices for the Broadband Service or the new Project Pronto UNEs, albeit higher TELRIC prices. As a preliminary matter, the current TELRIC methodology does not necessarily guarantee that Ameritech Illinois would recover the additional deployment costs that it would incur under the HEPAD. As Ameritech Illinois and other ILECs have consistently argued to this Commission and the courts, the FCC's TELRIC methodology does not permit an ILEC to recover all of its costs. That issue is currently pending before the U.S. Supreme Court. Moreover, the FCC's current TELRIC methodology (which the Eighth Circuit has held violates the plain language of the 1996 Act), if it is ultimately upheld by the Supreme Court, would not allow Ameritech Illinois to recover certain costs caused by inefficiencies engineered into the network or ineffective use of the capacity of the network.[25]

In addition, even assuming that Ameritech Illinois were permitted to establish Broadband Services and UNE prices at a level that would provide it with an *opportunity* to recover all of the increased costs that would flow from the HEPAD's Project Pronto recommendation, there is still a strong likelihood that Ameritech Illinois would not recover its costs. Indeed, in light of the higher prices that would result from Ameritech Illinois including in its Broadband Service or new Project Pronto UNE prices the cost of the inefficiencies that adoption of the HEPAD's recommendation would cause, it remains to be seen how many CLECs, if any, would purchase the new Project Pronto UNEs or the Broadband Service. As Staff witness Mr. Clausen testified, Ameritech Illinois cannot recover its costs unless the CLECs actually purchase the UNEs or the

[25] Of course, if this were to occur, it is Ameritech Illinois' position that it would be entitled, under the takings clause of the U.S. Constitution, to recover any costs attributable to regulatorily-imposed network inefficiencies.

service, and the CLECs bear no obligation or requirement to do so. Tr. at 101, 132-34. If significant numbers of CLECs decide not to order the UNEs or the service at all, Ameritech Illinois' investment would be stranded. Because CLECs are under no obligation to use the Project Pronto facilities that Ameritech Illinois might deploy, there is no guarantee that they will use those facilities sufficiently enough for Ameritech Illinois to recover its costs. This is especially true in a competitive market such as the advanced services market, where a variety of technologies compete.

The bottom line is that adoption of the HEPAD's Project Pronto recommendation would create a serious disincentive for Ameritech Illinois to further deploy DSL-related Project Pronto facilities in Illinois. Indeed, if Ameritech Illinois is unable to configure and deploy those facilities efficiently and receive a market-required return on its investment, there would be no sound business reason for it to continue such deployment. Moreover, the message sent by the imposition of costly and inefficient conditions on a voluntary offering in a new, competitive market—in which Ameritech Illinois has no monopoly power—will discourage Ameritech Illinois and other ILECs from making this type of substantial investment in the future. Instead of investing in an architecture that will benefit competitors equally, telecommunications companies like SBC will be incented to invest in such new technologies only where the regulatory climate is more hospitable. If ILECs are discouraged from investing in innovative new network architectures, this could result in depriving end users of another choice to access new advanced services technologies and could decrease the availability of an alternative platform for CLECs providing advanced services to access the mass market. Although Ameritech Illinois does not believe such a result is desirable, the alternative of putting the company and its investors at risk is even less desirable.

The HEPAD does not even acknowledge the fact that regulatory burdens could force Ameritech Illinois to cease further deployment of DLS-related Project Pronto facilities. This fact is a simple reality of the business world, where all companies, including Rhythms and Covad, must consider the economic interests of their investors. Ameritech Illinois' decision whether to deploy DSL-related Project Pronto facilities necessarily must be based on a careful analysis of the applicable economic factors, and is no different, in economic terms, than the analysis that Covad or Rhythms must undertake when deciding whether to purchase a particular type of DSLAM or deploy a DSLAM in a particular location. Indeed, no rational business enterprise will continue investing in a product or service if doing so is rendered burdensome and uneconomic, as the HEPAD's Project Pronto recommendation threatens to do to Ameritech Illinois' deployment of DSL-related Project Pronto facilities. The HEPAD recommends a different use for these DSL-related Project Pronto facilities than Ameritech Illinois contemplated when it made its initial investment decision, and substantially increases the risk of the investment.[26] Accordingly, Ameritech Illinois and SBC must carefully consider whether continued investment in the DSL-related Project Pronto facilities in Illinois is operationally and economically reasonable. At this point, Ameritech Illinois and SBC have placed further deployment of Project Pronto DSL facilities in Illinois on hold until they can complete this evaluation.

In this rehearing, the Commission is in a unique position to either encourage or discourage Ameritech Illinois' investment in new technologies serving new telecommunications

[26] Ameritech Illinois is willing and wants to make significant investments in Illinois. It does not want to be prevented from doing so by regulatory requirements that alter the parameters surrounding such investment. SBC worked with the FCC and the CLECs during the Project Pronto Waiver Proceeding and developed a detailed set of conditions which sought to balance the various parties' interests. It is not fair or reasonable at this point to change these carefully crafted conditions.

markets. The FCC has recognized the importance of encouraging incumbent LEC investment in network initiatives that will support Advanced Services, stating, "We are also committed to ensuring that incumbent LECs are able to make their decisions to invest in, and deploy, advanced telecommunications services based on market demand and their own strategic business plans, rather than on regulatory requirements. We intend to take deregulatory steps towards meeting this goal in a subsequent order."[27] The FCC went on to state, "We intend to address, in a future order, other specific forms of regulatory relief that may be needed to stimulate investment and deployment of advanced services by incumbents or new entrants, or whether other changes to the Commission's local competition rules may facilitate deployment of advanced services by competing carriers."[28]

As it stands, the HEPAD's Project Pronto recommendation directly contradicts the FCC statements. This recommendation, if adopted, would subject Ameritech Illinois' to new and ever-broadening regulatory requirements; prevent Ameritech Illinois from making investment decisions based upon its own business plans; and discourage future investment by making such investments unattractive. Am. Ill. Ex. 8.0 (Chapman) at 2-5. As noted by Staff witness Mr. Clausen, the Commission's decision on this issue should not "unduly reduc[e] Ameritech's incentive to roll out Project Pronto in Illinois." Tr. 95-96; Staff Ex. 1.0 (Clausen) at 2. Accordingly, the Commission should revise its Arbitration Decision as proposed by Ameritech Illinois, thereby allowing Ameritech Illinois to deploy and operate the DSL-related Project Pronto facilities in the economical and efficient manner for which they were intended.

[27] Deployment of Wireline Services Offering Advanced Telecommunications Capability, First Report and Order and Further Notice of Proposed Rulemaking, CC Docket No. 98-147, ¶ 3.

[28] Id. at ¶ 7.

6. The operational and technical problems associated with the HEPAD's Project Pronto recommendation would result even though that requirement only permits CLECs to designate and virtually collocate the NGDLC line cards.

A significant fact that the HEPAD fails to realize is that the operational and technical problems identified by Ameritech Illinois will occur even if CLECs are allowed only to virtually collocate line cards. Among other things, Ameritech Illinois has never provided a virtual collocation offering under which Ameritech Illinois, rather than the CLEC, possessed legal title to the equipment being collocated. More importantly, the issue of title ownership is a red herring. None of the operational and technical problems associated with the HEPAD's line card virtual collocation recommendation depend on whether Ameritech Illinois technically obtains legal title of those line cards. Rather, it is the CLECs' exclusive *use* and *control* of the line cards being placed in Ameritech Illinois' Project Pronto NGDLCs that cause the capacity, provisioning and maintenance problems discussed above.

More specifically, if CLECs are permitted to virtually collocate line cards, the risks of premature exhaust of the slot capacity of the NGDLC and of bandwidth capacity would remain the same. Under such circumstances, Ameritech Illinois could not assign multiple CLECs to the virtually collocated card, as it would be able to do in the absence of the HEPAD's line card collocation recommendation. Indeed, for all practical purposes, the line card would be reserved for the exclusive use of the CLEC who requested virtual collocation of the card. Again, if the CLEC did not use all four of the copper pairs wired to each of its line cards, there would be less efficient utilization, and hence higher costs per DSL line. The resulting inefficiencies also would limit the number of available DSL lines and hasten the exhaust of the NGDLC equipment. The exhaust situation would become increasing worse as more and more CLECs virtually collocated more and more line cards.

Similarly, with respect to DSL-related service and UNE provisioning, Ameritech Illinois would be required to engage in the steps outlined in part II.A.3 above. Specifically, Ameritech Illinois would have to dispatch a technician to the remote terminal and install a line card for every CLEC each time a CLEC requested virtual collocation.[29] If, on the other hand, Ameritech Illinois owned and controlled the line cards in the manner contemplated by the FCC's *Project Pronto Order*, the line cards could be pre-provisioned, and Ameritech Illinois would then only need to provision the service over that card. Tr. at 284. Although technicians obviously would have to be dispatched when the existing line card capacity is filled even where Ameritech Illinois owns and controls the line cards (Tr. at 284), the number of trips would be significantly greater if the CLECs owned the line cards, because Ameritech Illinois would have to dispatch a technician each time a CLEC desired to virtually collocate a line card. Tr. at 301. The number of trips would only increase as more and more CLECs requested collocation of more and more line cards. It is also significant that, because end user customers move and change service providers, the number of trips required to rearrange the cards at the NGDLC or replace one CLEC's card with another CLEC's card also would increase.

The maintenance problems identified above also would continue under the HEPAD's Project Pronto recommendation. Indeed, if a virtually collocated ADLU line card needed to be changed, Ameritech Illinois would have to track spares, identify the designator of the line card, determine whether the designator had provided a spare, locate that spare, or place a call or order to the designator to provide a spare. As described above, this likely would increase the mean time to repair on both the POTS side and the data side of the end-user customer's service, which would mean more time out of service. Additionally, as noted above, there would likely be

[29] Because line cards have to be dedicated to particular SAIs, it is unlikely that any CLEC will pre-provision ADLU cards in an appreciable quantity.

increased network troubles, because Ameritech Illinois would have to add or change line cards for CLECs as often as end user customers changed their data service providers. Am. Ill. Ex. 7.1 (Keown) at 5. Again, these maintenance problems would only become greater as more and more CLECs virtually collocate more and more line cards.

In sum, CLEC collocation of Project Pronto NGDLC line cards (whether physical or virtual) will result in severe operational and technical problems. If, on the other hand, Ameritech Illinois is allowed to own and control the Project Pronto NGDLC line cards in the manner contemplated by the FCC in the *Project Pronto Order*, the DSL-related Project Pronto facilities will be used in the most efficient and economical manner, and none of the operational and technical problems identified above would exist. Accordingly, the Commission should reject the HEPAD's recommendation and, instead, revise its Arbitration Decision by eliminating its Project Pronto NGDLC line card virtual collocation requirement.

B. THE HEPAD OVERLOOKS THE BENEFICIAL IMPACT DEPLOYMENT OF THE DSL-RELATED PROJECT PRONTO FACILITIES AND THE ASSOCIATED BROADBAND SERVICE OFFERING IN THE MANNER CONTEMPLATED BY THE FCC AND BY AMERITECH ILLINOIS WOULD HAVE ON CLECS, CONSUMERS, AMERITECH ILLINOIS AND THE PUBLIC AT LARGE.

An important fact which the HEPAD entirely ignores about Ameritech Illinois' planned deployment of the DSL-related Project Pronto facilities and the Broadband Service Offering is that CLECs, consumers, Ameritech Illinois and the public at large would benefit from the new facilities and service offerings in significant ways. With respect to CLECs, as the FCC has recognized, Ameritech Illinois' planned deployment of those facilities and the associated Broadband Services offering clearly would create new business opportunities for CLECs. *Project Pronto Order*, ¶¶ 23, 28. The Broadband Services offering would be available on identical terms to all CLECs, including Ameritech Illinois' data affiliate, and would allow data

CLECs to reach millions of customers that could not be reached efficiently or economically before. *Id*. The Broadband Services offering also would reduce the amount of up-front capital required for a CLEC to begin providing DSL service to a new community by minimizing the amount of collocation required and eliminating the need to purchase DSLAMs. In addition, and perhaps most importantly, as Mr. Clausen conceded during cross-examination (Tr. 110-112), and as the FCC has found (*Project Pronto Order* at ¶¶ 23, 28), Ameritech Illinois' planned deployment of the DSL-related Project Pronto facilities and the associated Broadband Services offering would give CLECs a *new, additional* option for providing DSL service. Moreover, data CLECs would retain all of the existing options available today for providing such data services. *Id*. In short, *the CLECs would lose nothing but gain access to a previously unavailable market*. This new market opportunity is particularly important to DSL service providers. In today's current market, the availability of cable modems far surpasses the availability of DSL technologies. The type of network investment represented by Ameritech Illinois' planned deployment of the DSL-related Project Pronto facilities will encourage the continued growth and development of DSL-based technologies. Am. Ill. Ex. 8.0 (Chapman) at 12-14.

As the FCC has recognized, the DSL-related Project Pronto facilities and the Broadband Service, as Ameritech Illinois plans to deploy them, would benefit consumers. The FCC stated in the *Project Pronto Order*: "we expect consumers will benefit not only from a more rapid deployment of advanced services, but from the increased choices that stem from the competitive safeguards contained in SBC's proposal."[30] The FCC went on to conclude that "SBC's proposal serves the public interest" and "should provide consumers a greater choice of both services and

[30] Project Pronto Order at ¶ 2.

providers in the near term".[31] The FCC also said: "In particular, we find that SBC's proposal should affirmatively and identifiably promote the rapid deployment of advanced services in a pro-competitive manner, thereby serving the goals of section 706."[32] Finally, the FCC stated, "Our approval of SBC's request subject to its pro-competitive commitments . . . paves the way for Rhythms and other carriers to compete for those customers [who would not be able to receive DSL service without Project Pronto]. SBC's commitments will facilitate Rhythms' access to remote terminals and enable Rhythms and others to differentiate their product offerings from those of SBC's Advanced Services Affiliate."[33]

Although the various commitments made by Ameritech Illinois in exchange for being permitted by the FCC to own and control the NGDLC line cards would create additional benefits to CLECs that would not exist absent Project Pronto, the HEPAD distorts those benefits. For example, under the FCC-adopted commitments and the *Project Pronto Order*, Ameritech Illinois has agreed not to retire, through September 2001, any central office-terminated copper loops overlaid by the Project Pronto architecture, except as required by acts of God. Additionally, Ameritech Illinois is prohibited through September 2003 from using its retirement policy to retire more than 5% of its total CO-terminated copper loops in service as of September 1, 2000. The HEPAD nevertheless makes much out of the fact that Ameritech Illinois has no restrictions from retiring its copper plant after 2003. The HEPAD states:

> SBC has made only very short-term commitments that home run copper will continue to be available as a means of line sharing. . . . Should Ameritech-IL begin to phase out is copper loops, and continue to refuse line sharing over its

[31] *Id.* at ¶ 23.

[32] *Id.*

[33] *Id.* at 28.

> Project Pronto network, Ameritech IL could effectively bar all other providers from large segments of the potential market for xDSL based services.

HEPAD at 24. The fact of the matter is that Ameritech Illinois has previously *never* had *any* of these types of restrictions on retirement of its plant. This new commitment, as well as the other commitments made by SBC's ILECs, provides CLECs with benefits that they would not otherwise enjoy absent Project Pronto.

Ameritech Illinois' planned deployment of DSL-related Project Pronto facilities also will have a substantial beneficial impact on the public in Illinois and elsewhere. Large network investments, such as Ameritech Illinois' planned investment in these facilities, equate to additional jobs. These jobs include the Ameritech Illinois employees who implement the deployment of those facilities as well as the employees of the various vendors, suppliers and contractors supporting that deployment. The deployment of these facilities also would provide consumers (as well as advanced services providers) with additional DSL service choices that are not available today. It also would enable more schools to access the broadband services that are becoming increasingly important in today's technological society. It would promote telecommuting, which opens up many previously unavailable opportunities to the disabled and homebound, as well as providing benefits to the environment through decreased need for commuting. This is precisely the kind of investment the 1996 Act envisioned and sought to encourage.

Ameritech Illinois also expects to benefit from its planned deployment of the DSL-related Project Pronto facilities. This is an unsurprising and basic economic and business fact, given that Ameritech Illinois is the party making the investment in those facilities. The HEPAD, however, states:

> The Commission is not persuaded by Ameritech IL's allegations that it is implementing Project Pronto for the benefit of CLECs. . . . The evidence in this

> case clearly and unequivocally demonstrates that SBC is deploying Project Pronto to generate significant savings in maintenance costs and to increase the ability of its data affiliates to serve customers with xDSL service. . . . If Ameritech-IL is permitted to deny access to CLECs, then no carrier other than Ameritech-IL will be able to provide xDSL services to those customers with loops in excess of 18,000 feet. . . . Ameritech-IL argues that the FCC has found that it is not a monopoly provider of advanced services. The Commission wants to ensure that the situation does not change.

HEPAD at 23-24. The HEPAD's suggestion that the benefits that Ameritech Illinois would derive from its investments are somehow improper or would impede the CLECs' ability to compete are baseless and wrong. As with any other business, Ameritech Illinois is subject to the basic rules of economics. Despite the HEPAD's unsupported suggestion to the contrary, the Advanced Services market is a competitive market in which Ameritech Illinois does not have any type of monopoly power. Clearly, Ameritech Illinois must have the opportunity to benefit from the investments that it makes in that market, otherwise it would have no economic basis for making those investments.

Moreover, the HEPAD's above suggestion that Ameritech Illinois would deny CLECs access to the services and features obtainable through its DSL-related Project Pronto facilities is objectively wrong and simply does not make sense. Ameritech Illinois has provided and will continue to provide unaffiliated CLECs will access to its network on the exact same terms and conditions that it has made available to its affiliated data CLEC, AADS.[34] Moreover, because of the 1996 Act's nondiscrimination requirements, Ameritech Illinois could not raise impediments to its CLEC customers' provision of DSL services. Indeed, the benefits Ameritech Illinois stands to derive from its planned deployment of the DSL-related Project Pronto facilities are a direct result of its success in providing wholesale Broadband Services to all of its CLEC

[34] Additionally, the bulk of the "maintenance savings" that the HEPAD refers to do not result from Ameritech Illinois' deployment of DSL-related Project Pronto facilities on the end-user "side" of the network, but rather from the planned deployment of interoffice facilities.

customers, whether affiliated or unaffiliated. Ameritech Illinois does not provide any retail DSL services. Rather, the Broadband Service Offering is a wholesale offering to CLEC customers. Accordingly, it is in Ameritech Illinois' best interest to make the Broadband Service offering as appealing as possible to CLECs, otherwise Ameritech Illinois would risk adversely affecting the profit potential of its DSL-related Project Pronto facilities. Ameritech Illinois has every incentive to assist CLECs in the efficient utilization of Ameritech Illinois' planned DSL-related network facilities and the introduction of new DSL-related capabilities into Ameritech Illinois' network. It simply would not make economic sense, and would defeat the purpose of deploying the DSL-related Project Pronto facilities, for Ameritech Illinois to do otherwise. Am. Ill. Ex. 8.2 (Chapman) at 1-5.

In short, the HEPAD entirely overlooks the many beneficial impacts that deployment of the DSL-related Project Pronto facilities and the associated Broadband Service Offering, in the manner contemplated by the FCC and by Ameritech Illinois, would have on CLECs, consumers, Ameritech Illinois and the public at large. Rather, the HEPAD speculates over what might happen in the distant future. As discussed in part I above, the Commission cannot properly unbundle Project Pronto based on unsubstantiated assertions about what might happen *in the future*. Rather, an unbundling determination must be based on existing facts in the market as it exists *today*. *UNE Remand Order*, ¶ 23. Those market facts establish beyond question that Ameritech Illinois' DSL-related Project Pronto facilities and the associated Broadband Services offering would give CLECs a *new, additional* option for providing DSL service, in addition to all of the existing options available to those CLECs today, and hence would provide significant benefits to CLECs, consumers, Ameritech Illinois and the public at large.

C. THE HEPAD INCORRECTLY FINDS THAT AMERITECH ILLINOIS' PLANNED DEPLOYMENT OF DSL-RELATED PROJECT PRONTO

FACILITIES WILL LIMIT THE TECHNOLOGY, CONFIGURATION AND TYPES OF DSL SERVICES THAT CLECS COULD OTHERWISE USE.

In support of its Project Pronto recommendation, the HEPAD states:

> The wholesale service offering leaves all control in the hands of Ameritech-IL as to the types of xDSL service that may be provided and the timetable over which new services will be provided. . . . Moreover, limiting CLECs to the broadband service would restrict them in reselling only those xDSL services also provide by Ameritech's affiliate, without any opportunity to provide different types of xDSL services and different qualities of service.

HEPAD at 23. As a preliminary matter, the issue of different DSL "flavors" is not an issue involving the HFPL UNE established by the FCC in its *Line Sharing Order*. Am. Ill. Ex. 6.0 (Lube) at 36-37. Specifically, some of the types of DSL service that Rhythms and Covad apparently want to be able to provide using their own line cards in Ameritech Illinois' Project Pronto NGDLC equipment cannot even be used in a HFPL line sharing arrangement as defined by the FCC. At this time, FCC-defined line sharing can occur only with a limited number of types of DSL, including ADSL, G.lite, and RADSL. For example, Rhythms and Covad have suggested that they want to use their own line cards to provide SDSL and HDSL. As the FCC recognized in its *Line Sharing Order*, neither of these DSL services can be line-shared over the HFPL. Am. Ill. Ex. 6.0 (Lube) at 36-37. Accordingly, Rhythms and Covad's desire to provide such DSL service "flavors" over Ameritech Illinois' planned DSL-related Project Pronto facilities is irrelevant. Indeed, this rehearing involves an arbitration regarding the *HFPL, not DSL services generally*.

Moreover, the record establishes that CLECs cannot get various "flavors" of DSL by using one vendor's line card in another vendor's NGDLC. Ameritech Illinois' vendor, Alcatel, has stated:

> "Only line cards supplied by Alcatel for Litespan or provided under license can be installed and used in Litespan systems. As noted above, these are software-

> controlled systems. The software enables the service delivery and maintenance functions. The software is copyright protected and distributed only under restricted license provisions that prohibit use or modification by others. In addition, each line card is designed to mechanical and electrical specifications that ensure they do not interfere with other services or the performance of the system. Accordingly, the installation of other line cards is precluded by contract warranty provisions designed to ensure reliable service and system performance."

See Am. Ill. Ex. 7.0 (Keown), Attachment JEK-3. In addition, in their comments filed in response to a pending FCC FNPRM proceeding, Alcatel states:

> " As a line card manufacturer, Alcatel recognizes that it would not be feasible or practical to develop line cards that could be used in a multiplicity of other systems, even if there were no backplane or software access restraints. There must be several dozen (or more) system and software vintages in the country. The combination of mechanical and software requirements that would have to be met would be overwhelming. Likewise, it would be just as difficult for other manufacturers to develop line cards for the many vintages of Alcatel's systems and software releases (if the software were even accessible) along with others."[35]

Nortel Network filed similar comments in the same FCC FNPRM proceeding. Specifically, Nortel stated:

> "The DLC market has evolved without industry standards having been developed to allow interchangeability of line cards. Moreover, Nortel Networks is not aware of any effort underway to attempt to develop such industry standards. Without standards, it would be virtually impossible to use different manufacturers' line cards in a single DLC. Finally, given the vast differences in technologies used by different manufacturers and the rapidly evolving nature of those technologies, it would be very difficult, if not impossible, to develop industry standards without thereby stifling technological development."

See Am. Ill. Ex. 7.0 (Keown) at 19.

In any event, the HEPAD's asserted concerns about CLECs obtaining different "flavors" of DSL and not being able to "differentiate" their DSL product offerings are baseless. The Project Pronto NGDLCs manufactured by Alcatel can currently support ADSL and a TDM version of HDSL. In the future, Alcatel is expected to offer HDSL-2 (TDM), g.SHDSL and

[35] *See* Am. Ill. Ex. 7.0 (Keown) at 19.

G.Lite DMT (See Attachment JEK-3). Am. Ill. Ex. 7.0 (Keown) at 17-18. In fact, Ameritech Illinois has committed to making G.lite available on an RT-by-RT basis starting within six months after development and commercial availability from Alcatel. Am. Ill. Ex. 6.0 (Lube) at 37-38. Ameritech Illinois also has committed to conduct collaborative discussions with the CLECs and equipment manufacturers to address future types of DSL service that may be supported over the Project Pronto network. Am. Ill. Ex. 6.1 (Lube) at 5. Clearly, different "flavors" of DSL will be available with Ameritech Illinois' Broadband Service Offering and CLECs will have input on future developments.

In this same vein, the HEPAD's claim that the Broadband Service offering will not allow for sufficient product differentiation by CLECs is not supported by the record and, in fact, has been rejected by the FCC. *See Project Pronto Order*, ¶¶ 23, 28. The record establishes that, under the Broadband Service Offering, CLECs have the ability to differentiate their retail DSL products from other CLEC's retail DSL products. Indeed, every CLEC will have nondiscriminatory access to all features and functions, both present and future, actually deployed with Project Pronto NGDLCs and made available through the Broadband Service. Ameritech Illinois intends to make new features and functions available in the Project Pronto architecture, so that additional services can be offered by the CLECs in the future. Moreover, under Ameritech Illinois' Broadband Service offerings, even the current ADSL capabilities of the Project Pronto architecture can be offered by CLECs with different combinations of upstream and downstream speeds. Am. Ill. Ex. 6.0 (Lube) at 38-39; Ex. 6.1 (Lube) at 12; Ex. 6.2 (Lube) at 36. As the FCC recognized in the *Project Pronto Order* (at fn. 82), the Broadband Service Offering allows for a variety of different combinations of upstream and downstream data

speeds.[36] Therefore, DSL product differentiation is already available to all data CLECs on a nondiscrminatory basis through the Broadband Service.[37]

As noted above, the FCC already has rejected Rhythms and Covad's assertions about their alleged inability to differentiate their product offerings in the *Project Pronto Order*. Specifically, the FCC found:

> Our approval of SBC's request subject to its pro-competitive commitments . . . paves the way for Rhythms and other carriers to compete for those customers [who would not be able to receive DSL service without Project Pronto]. SBC's commitments will facilitate Rhythms' access to remote terminals and enable Rhythms and others to *differentiate their product offerings from those of SBC's Advanced Services Affiliate*.

Id., para. 28 (emphasis added). The FCC emphasized that the SBC ILECs' commitments will "help ensure that consumers will have a wide array of choice[s]" because SBC will "mak[e] available all features, functions, and capabilities of the equipment installed in remote terminals at just, reasonable, and nondiscriminatory rates, terms, and conditions." *Id.*, para. 42. "By unleashing the full potential of the [Project Pronto] equipment," the FCC found, "SBC's commitment will help competitive LECs provide innovative, exciting new services" and enable CLECs to "compete more effectively against SBC by differentiating their product offerings." *Id.*, para. 45. Obviously, the FCC was convinced that the Broadband Service Offering allows

[36] As the record on rehearing establishes (Tr. 113-116, 421-424), as a mathematical matter, there are almost three million possible upstream and downstream combinations potentially available for the current Broadband Services data offering. Although Ameritech Illinois' ordering system for the Broadband Service, known as SOLID, presently limits the potential number of speed combinations available to CLECs ordering the Broadband Service to about 90 combinations, there is no evidence that those 90 combinations are insufficient for product differentiation purposes. Moreover, Ameritech Illinois could expand the number of datastream speed combinations available through SOLID in the future if the currently available 90 combinations ever became insufficient.

[37] It should also be noted that Ameritech Illinois' Broadband Service merely provides CLECs with another option for offering DSL services to end users, in addition to all of the pre-existing options for providing such DSL services. Accordingly, data CLECs who want to differentiate their DSL products are also free to do so through these other pre-existing means for providing DSL service. Am. Ill. Ex. 6.1 (Lube) at 12-13.

Rhythms and Covad to differentiate their product offerings. This Commission should find likewise.

It again should be noted that Ameritech Illinois is required by the *Project Pronto Order* to conduct, is already conducting, and will continue to conduct, collaborative discussions with the CLECs to address further types of DSL that may be supported over the Project Pronto DSL-related facilities. The HEPAD, however, disregards this fact. The HEPAD also ignores the fact that Ameritech Illinois, not Rhythms or Covad, is the party deploying the DSL-related Project Pronto facilities and bearing all of the associated investment risk. As a result, neither Rhythms nor Covad, nor any other CLEC, should be able to dictate the deployment of a technology, a topology, a manufacturer, or even a feature or software release in Ameritech Illinois' network. Am. Ill. Ex. 6.2 (Lube) at 14-15. As explained above, Ameritech Illinois made its initial decision to deploy DSL-related Project Pronto facilities based on sound economic and technical considerations. It cannot be forced to now deploy a different architecture that is neither economical nor technically efficient. As Ameritech Illinois explained in its Brief on Rehearing (at pp. 13-14) and in its Initial Brief in Docket No. 00-0393 (at pp. 25-27), under the Eighth Circuit's decisions in *IUB I* and *IUB III*, Ameritech Illinois cannot be lawfully required to unbundle a superior or different network than that which Ameritech Illinois has actually deployed. If Rhythms or another CLEC wants a different or particular type of DSL network technology or topology designed to serve its own individualized business needs or objectives, it certainly could undertake its own deployment of that other network. That is the essence of competition.[38]

[38] It is worth noting that, even if a CLEC bought or designated a line card from the vendor that manufactured the NGDLC, there is no guarantee that the card would deliver the service expected by the CLEC. More specifically, the entire NGDLC system must work together to provide the DSL and voice services. The line cards alone will not provide the total functionality of any service. There has to be system-level, shelf-level and card-level software

D. THE HEPAD'S FINDING THAT IT IS TECHNICALLY FEASIBLE TO FIBER SHARE OVER SOME TYPES OF NGDLC SYSTEMS IS IRRELEVANT TO THE COMMISSION'S UNBUNDLING DETERMINATION.

The record on rehearing establishes that the vast preponderance of the fiber-fed NGDLC equipment being deployed by Ameritech Illinois under Project Pronto is Alcatel Litespan 2000, which utilizes separate fiber paths for data and voice. This literally means that only voice services such as POTS travel on the fibers dedicated to voice transport, and only data services such as DSL travel on the fibers dedicated to data transport. Therefore, no fiber sharing will take place within these Project Pronto NGDLC systems. Am. Ill. Ex. 6.0 (Lube) at 20. Although no party disputed that these NGDLC facilities, as deployed by Ameritech Illinois, will not carry voice and data traffic over the same fiber, Rhythms and Covad attempted to make much out of the fact that Ameritech Illinois could, as a technical matter, multiplex both voice and data signals onto the same optical signal (by purchasing and installing additional equipment) for transport over a single fiber, if it desired to do so. Surprisingly, the HEPAD appears to accept Rhythms and Covad's irrelevant and illegal argument. HEPAD at 24.

The HEPAD is wrong, and its endorsement of the CLECs' assertion is a red herring. Ameritech Illinois should not be, and legally cannot be, required to incur the additional costs associated with deploying DSL-related facilities that carry voice and data over the same fiber. Ameritech Illinois has sound business and technical reasons for building its network in the

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working together to provide service. In addition, all the hardware (e.g., line cards and common cards), when combined with the software, has to work together in order to deliver the expected functionality or service. Without the correct version of system software, the capability sought by the CLEC may not be available on the NGDLC RT. Since the line card is only a sub-component of the NGDLC system, it has to match the common software of the overall system in order to deliver the desired service. Am. Ill. Ex. 7.0 (Keown) at 12-13. It again must be noted that, under *IUB I* and *IUB III*, Ameritech Illinois cannot be lawfully required to upgrade its software to be compatible with the CLECs' line cards, as such an obligation would improperly require Ameritech Illinois to build a different network or provide superior quality service to CLECs.

manner it has chosen, and its decision should not, and cannot, be second-guessed or nullified by CLECs or this Commission.

SBC's purchasing decisions with respect to the DSL-related Project Pronto facilities that it plans to deploy are driven in principal part by the desire to make the deployment of those facilities cost-effective. As the record on rehearing establishes, for a few select Project Pronto RT locations, Ameritech Illinois plans to deploy Alcatel Litespan 2012 NGDLC equipment. This version of the Alcatel NGDLC equipment includes built-in OC-12 SONET multiplexer functionality at both the RT and the central office. This built-in SONET multiplexer functionality is used to establish an OC-12 optical system between the RT and the central office. This OC-12 system has the capacity for four OC-3 optical signals, allowing the OC-12 system to transport the NGDLC's voice OC-3 signal, the NGDLC's data OC-3c signal, and two additional OC-3 signals over the same fiber.[39] However, Ameritech Illinois plans to deploy the Alcatel Litespan 2012 NGDLC equipment for a Project Pronto RT site *only* when there is demand for additional high-capacity services in the area served by that RT site that cannot be served by the Alcatel Litespan 2000 NGDLC equipment. For example, if there were demand for DS-3 and/or OC-3 services for end users in that geographic area, the bandwidth in the two additional OC-3 signals available with the Alcatel Litespan 2012 NGDLC equipment could be used to serve those needs. Absent circumstances where such high demand exists, it is *not* economical for Ameritech Illinois to deploy the more-costly Alcatel Litespan 2012 NGDLC equipment for Project Pronto. Am. Ill. Ex. 6.0 (Lube) at 21.

In most instances, *i.e.*, where Ameritech Illinois plans to deploy the Alcatel Litespan 2000 NGDLC, it would be possible to combine voice and data on the same fiber only by two

[39] Notably, this OC-12 multiplexing is based on time-division multiplexing, not on any wavelength multiplexing.

means. First, Ameritech Illinois could combine (*i.e.*, multiplex) these two optical signals in a higher-speed SONET system by purchasing and installing outboard multiplexers in the RT site and central office. However, doing so merely to force the NGDLC voice and data signals onto the same fibers would clearly amount to uneconomic use of otherwise unnecessary and costly multiplexing equipment. It simply would not be cost-justified for Ameritech Illinois to purchase and install the outboard SONET multiplexers for this purpose. Second, the Alcatel Litespan 2000 NGDLC could be made to carry voice and data signals on the same fibers by purchasing and installing additional components with the Litespan NGDLC equipment. These components would reconfigure the Litespan NGDLC system architecture for wavelength division multiplexing ("WDM"), such that the OC-3 signal for voice and the OC-3c signal for data are transmitted at separate wavelengths (*i.e.*, colors of light) through the same fibers. Again, however, Ameritech Illinois has no plans to deploy the additional Alcatel WDM components for the Litespan NGDLC systems, because doing so would not be cost-effective. Simply put, the additional cost of the equipment required to achieve this reconfiguration would be much greater than the incremental cost of using separate fibers for voice and data between the RT and the Central Office. Am. Ill. Ex. 6.0 (Lube) at 22-23.

The bottom line is that Ameritech Illinois is under no obligation to purchase any particular or additional equipment to deploy in its network, particularly where that additional equipment is unnecessary and more costly, and where there is no economic reason for utilizing such equipment. The type of NGDLCs that Ameritech Illinois plans to deploy under Project Pronto will in virtually all instances *not* multiplex data and voice signals onto the same fibers. It is irrelevant whether Ameritech Illinois' NGDLC manufacturers make any other equipment that does enable such fiber sharing, or whether another manufacturer's equipment permits or utilizes

such fiber sharing. Ameritech Illinois chooses its suppliers of electronic equipment based upon many factors, such as availability, system capacity, delivery interval, price, and warranty. Ameritech Illinois' business decisions with respect to Project Pronto are based upon economic engineering principles and are designed to achieve the most cost-efficient deployment of the facilities it plans to deploy. Am. Ill. Ex. 6.2 (Lube) at 6. As acknowledged by Staff witness Mr. Clausen, such business decisions are clearly within Ameritech Illinois' discretion. Staff Ex. 1.0 (Clausen) at 6.

More importantly, as a legal matter, and as explained in part I above, Ameritech Illinois is under no obligation to purchase any particular or additional equipment to deploy in its network, particularly where that additional equipment is unnecessary and more costly, and where there is no economic reason for utilizing such equipment. Clearly, to the extent that the HEPAD's Project Pronto recommendation would require Ameritech Illinois to deploy a certain type of equipment associated with Project Pronto which is *different* from what Ameritech Illinois plans to deploy, or to *add* additional equipment to the Project Pronto architecture that Ameritech Illinois is not planning to add, it violates the Eighth Circuit's decisions in *IUB I* and *IUB III*.

It also should be noted that nothing in the 1996 Act or the FCC's implementing rules allows a CLEC or a regulatory body to dictate the type of technology or equipment, or the manufacturer of that equipment, that an incumbent LEC deploys in its network. Am. Ill. Ex. 6.0 (Lube) at 23-24. The HEPAD's Project Pronto recommendation seems to assume that Ameritech Illinois should build a network that has no technological limitations, and should do so regardless of the cost of that network. Any network technology, however, intrinsically has limitations. Stated another way, specific network investments cannot possibly provide every conceivable network feature or function for every conceivable service offering that any particular carrier

might want to offer end users. Am. Ill. Ex. 6.1 (Lube) at 8. More importantly, all network investments involve risk to the investor—*i.e.*, whether there will be a demand for services that utilize that investment, and whether the investor will be able to be recover the investment before it becomes obsolete. It would be inappropriate for any other party, whether it be this Commission or another carrier, to dictate the type of new technology investments that Ameritech Illinois chooses to make in its network. Am. Ill. Ex. 6.1 (Lube) at 8-9. Yet that is exactly what the HEPAD's recommendation threatens to require.

The record on rehearing also establishes that there is no anti-competitive reason for Ameritech Illinois choosing to deploy a fiber-fed NGDLC technology that utilizes separate fibers for data and voice. This is demonstrated by the fact that Ameritech Illinois makes the Project Pronto architecture available to every CLEC, including Ameritech Illinois' advanced services affiliate, on the same basis via the wholesale Broadband Service, whether or not voice and data signals travel over the same fibers. Moreover, as far as a CLEC's ability to provide DSL service to an Ameritech Illinois POTS end user is concerned, it simply does not matter whether or not the data and voice signals travel on the same of different fibers. What is relevant, and what is beyond question, is the fact that Ameritech Illinois' planned deployment of DSL-related Project Pronto facilities provides CLECs with an *additional* option, via the wholesale Broadband Service, for accomplishing the same functional result as FCC-required line sharing, which additional option would not otherwise exist. Am. Ill. Ex. 6.0 (Lube) at 24-25.

E. THE COMMISSION SHOULD REFRAIN FROM UNBUNDLING PROJECT PRONTO BECAUSE THOSE ISSUES ARE PENDING BEFORE THE FCC.

There are other strong policy reasons for this Commission not to adopt the HEPAD's recommendation to require the unbundling of the DSL-related Project Pronto facilities and the forced collocation of line cards. Specifically, the FCC is considering these exact same issues as

part of pending rulemakings before it. Issues regarding the collocation of line cards in NGDLCs and the unbundling of associated network facilities are pending before the FCC in the *Collocation FNPRM* in CC Docket 98-147 (the *Advanced Services* docket), the comment cycle of which concluded on November 14, 2000. In that case, the FCC specifically asked parties to address Rhythms' proposal that CLECs be permitted to "collocate" line cards in RTs. See *Collocation FNPRM*, ¶ 109; *Id.*, ¶ 82 (seeking comment on whether line cards are "equipment necessary for interconnection or access to unbundled network elements" as required by Section 251(c)(6)). The FCC has said it will consider all of the "difficult and complex" issues "involved with competitive access to remote terminals" in the context of that proceeding. *Project Pronto Order*, ¶ 49. And, of course, "SBC will be bound by any rules ultimately developed in that proceedings that affect the way in which SBC's incumbent LECs provide access to remote terminals." *Id.*, ¶ 9. It would be unwise for the Commission to prejudge these "difficult and complex" issues, as the HEPAD's Project Pronto recommendation does. Indeed, if it were to adopt the HEPAD's Project Pronto recommendation, the Commission would risk unnecessary conflict with the FCC's ultimate rulings.

Similarly, issues regarding CLEC access to RTs and NGDLCs are being addressed by the FCC in its ongoing proceeding initiated by its August 10, 2000 Fifth Further Notice of Proposed Rulemaking in CC Docket 96-98 ("*NGDLC FNPRM*"). In that August 10 Notice, the FCC, citing SBC's October 1999 press release announcing Project Pronto, has sought comment on, among other things, "whether the deployment of new network architectures . . . necessitates any modification to or clarification of the [FCC's] local competition rules, particularly our rules relating to unbundled transport, loops, and subloops." Accordingly, the FCC will address in the *NGDLC FNPRM* as well as the *Collocation FNPRM* whether the unbundling of Project Pronto

facilities is technically feasible and may be required consistent with the Act. Given the FCC's continued involvement in these issues, the Commission should refrain from addressing them in this arbitration. Indeed, if this Commission were to prejudge these issues, as the HEPAD's Project Pronto recommendation does here, it would risk unnecessary conflict with the FCC's ultimate ruling.[40]

The FCC also has just initiated an additional rulemaking that will address all of the significant technical and legal issues covered by the HEPAD, but with widespread industry participation and a much more developed record. In an order in its Advanced Services docket issued January 19, 2001,[41] the FCC opened the further rulemaking and sought comment on numerous issues regarding RTs, collocation, unbundling, and access to fiber portions of loops, including:

> "whether a requesting carrier may physically or virtually collocate its line card at the remote terminal by installing it in the incumbent's DLC for the purposes of line sharing" (¶ 56);
>
> the method of access provided by the SBC ILECs under the *Project Pronto Order* as an alternative to collocation of a DSLAM at an RT; (¶ 59)
>
> "whether the Commission can require such an arrangement [as offered under the *Project Pronto Order*] under our current unbundling rules" and, if not, "whether our unbundling rules should be modified to permit this type of arrangement. Specifically, we ask parties to address whether this type of arrangement should only be made available when there is no room for collocation at the remote terminal or whether incumbent LECs should be required to make such an offering in all circumstances when they deploy fiber in the loop" (*ibid.*);

[40] The Project Pronto Order notes that state commissions will "maintain their usual oversight of the offerings made available by SBC's incumbent LECs." Project Pronto Order, para. 25 n.75. Any such oversight, however, must be consistent with the 1996 Act and not impede achievement of its objectives. The HEPAD's Project Pronto recommendation fails both tests.

[41] In the Matter of Deployment of Wireline Services Offering Advanced Telecommunications Capability, CC Docket 98-147, Third Report and Order on Reconsideration in CC Docket No. 98-147, et al. (rel. Jan. 19, 2001) ("Advanced Services Third Reconsideration Order").

> "whether it is technically feasible for competitors and incumbents to share the fiber feeder between the remote terminal and the central office" (¶ 60);
>
> "whether this type of shared access [to the fiber portion of a loop] can be achieved through purchasing unbundled packet switching capability" (¶ 63); and
>
> "should a similar type of platform [to the voice UNE-P] be made available to competitors to provide line-shared data services" What changes, if any, in our unbundling rules are necessary to effectuate such a offering? How would the UNE-data platform be define? How would the Commission's impairment analysis be applied to such a situation? What are the legal and policy reasons that favor and disfavor requiring the incumbents to male a UNE data-platform available, irrespective of the ability to collocate, for the purpose of enabling competitors to provide competing high-speed data services when fiber has been deployed in the loop?" (¶ 64).

It is thus clear that the FCC is covering the same ground that the HEPAD prematurely covers on a limited record. Given that its regulation must be consistent with the FCC's, the only prudent course for the Commission is to avoid imposing any requirements that might later be rejected or substantially modified when the FCC weighs in.

CONCLUSION

For the foregoing reasons and the reasons set forth in Ameritech Illinois' Brief on Rehearing and Application for Rehearing in this case, the Commission should revise the HEPAD in accordance with Ameritech Illinois' exceptions.

Respectfully submitted,

AMERITECH ILLINOIS

By:_____
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Dated: January 25, 2001

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Attachment A

PROPOSED LANGUAGE CHANGES

The HEPAD's proposed Commission Analysis and Conclusion section on Project Pronto issues appearing on pages 20 through 26 of the HEPAD, should be replaced with the following language:

Commission Analysis and Conclusion on Project Pronto Issues:

For the reasons set forth by Ameritech Illinois, we conclude that that the Arbitration Decision's Project Pronto requirement conflicts with the law and therefore revise that decision to eliminate that requirement. Specifically, allowing Rhythms and Covad to virtually collocate line cards in Project Pronto NGDLCs, and the resulting *de facto* creation of new Project Pronto-related unbundling obligations, is unlawful, and would be bad policy, for the following reasons: *First*, the Project Pronto UNE/line card collocation requirement directly conflicts with the *UNE Remand Order*, and therefore is preempted under federal law. *Second*, the necessary and impair standards of Section 251(d)(2) of the 1996 Act have not been met. *Third*, the Arbitration Decision's Project Pronto requirement conflicts with the FCC's national policy framework established in the FCC's *Project Pronto Order*, and therefore, is preempted by federal law. *Fourth*, the Project Pronto UNE/line card collocation requirement unlawfully requires Ameritech Illinois to create new combinations of network elements for CLECs. *Fifth*, the Project Pronto UNE/line card collocation requirement violates Section 261(c) of the Act. *Sixth*, collocation of line cards does not meet the standards set forth in Section 251(c)(6). *Seventh*, the Project Pronto UNE/line card collocation requirement could unlawfully require Ameritech Illinois to build new facilities or provide superior quality service to CLECs, in violation of *IUB I* and *IUB III*. *Eighth*, imposing a Project Pronto UNE/line card collocation requirement does not represent good policy and would disserve the public interest.

For all of the reasons explained above and by Ameritech Illinois in its Brief on Rehearing, the Arbitration Decision's requirement that Ameritech Illinois permit Rhythms and Covad to virtually collocate their own line cards in Ameritech Illinois' Project Pronto NGDLCs is unlawful and unwise from a policy perspective. Accordingly, we hereby revise the Arbitration Decision to eliminate the Project Pronto requirement.